

# From Classroom to Coach: One Teacher's Journey

In addition to differentiating and developing curriculum, this teacher's transition to coaching in an early childhood setting involves a complex blend of mentoring teachers, teaching students, and discovering resources.

By Penny Cataldo

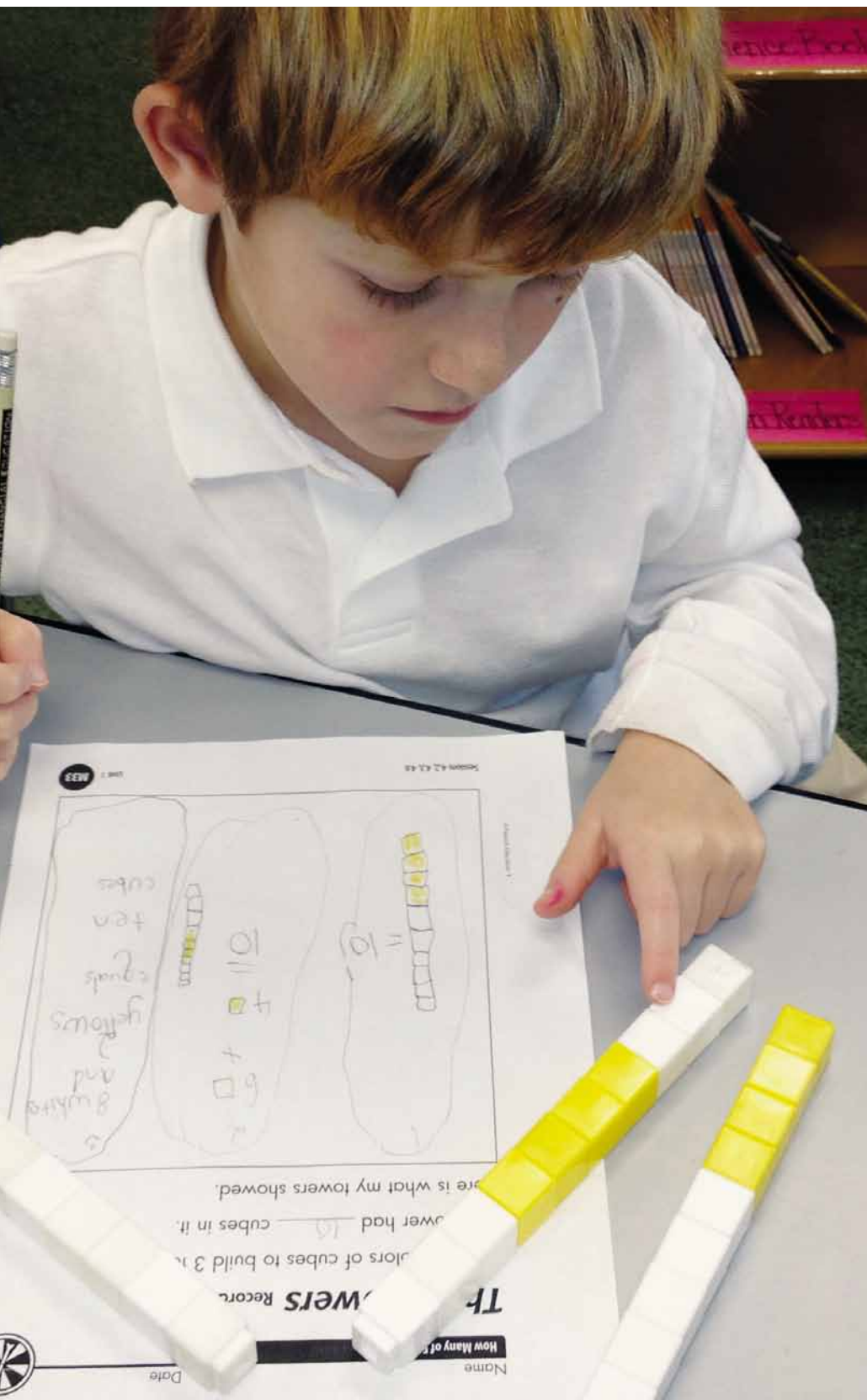
It is 10:30 in the morning, and I sing a song to gather an energetic group of three- to four-year-olds to sit with me in a circle. "Let's see," I begin, "the last time I came for math, we were talking about taking a trip to the zoo!" I notice a few eyes begin to open wide, and I hear some giggles. "Oh, now I remember. We were talking about having icecream for lunch!" I add. By now I hear a chorus of laughter, and several children are shouting. "Pattern blocks; it was pattern blocks!"

"Pattern blocks?" I say in mock surprise. "We were talking about pattern blocks?"

"Yes!" the class shouts, and now I know that I have everyone's attention and that we are all ready—especially me—for another exciting math adventure (lesson) in our school's early childhood wing.

As the early childhood math coach, specialist, teacher, mentor (sometimes I am not quite sure which title to use), I expect each day to bring its own set of challenges and excitement. On any given day, I might preplan a lesson with a teacher and later observe as she instructs her class; play a game with a small group of students; and co-teach with or model a lesson for a lead teacher and her assistant. I meet with teachers, work with students, research curriculum ideas, and provide support where needed. Working with ten different classes, junior pre-K–grade 1 (three-year-olds through seven-year-olds), I see a whirlwind of math activity: One senior pre-K class is





connecting Unifix® cubes out the door; kindergartners are gluing paper squares to represent number arrangements of color tiles they created; and a child in junior pre-K announces that she put a napkin next to every cup as the snack helper, demonstrating her grasp of one-to-one correspondence. First graders are using pictures, numbers and/or words as they figure out solutions to story problems. Although each day is different, some aspects remain constant: Early childhood math is alive and well and is a part of the day, every day, at our school.

### Where we are going

When I was first approached to be the early childhood math coach, I was not quite sure what my role was or what to expect. After thirty years of teaching experience and twenty at my present school, I had certainly taught a lot of math. But coaching others was different. I was not going to teach my own class and determine a set of goals for just those students. Instead, I was supposed to lend my “expertise” to my fellow early childhood colleagues and help them develop their math practice. Given a blank slate, I reflected on my approach. The first step I took was to discuss ideas with some trusted colleagues. Although many were helpful, I was especially fortunate to have Hal Melnick, our mathematics consultant from Bank Street College, first-grade teacher Cathy Stadler, and former math coach Babs Johnson to guide me. In addition to moral support, their insight and suggestions proved to be invaluable. Stadler suggested I read *Content Based Coaching* (West and Staub 2003). Melnick suggested another book, *Developing Math Concepts in Pre-Kindergarten* (Richardson 2008), and Johnson helped me formulate a job description.

So, that summer, I read. *Content Based Coaching* (West and Staub 2003) especially helped me establish guidelines and goals for the coming school



Manipulating pattern blocks helps young learners recognize and construct patterns.

year and enabled me to develop coaching moves for working with particular teachers that would be effective with their teaching style. A valuable insight was to realize that coaching a new teacher—versus an experienced one—would require a different approach, including learning to discuss ideas that invite teachers to verbalize their thoughts. Asking specific questions helped inform me about a teacher's comfort level in teaching math, his or her understanding of the concepts to be taught, and his or her knowledge of child development.

### Putting the wheels on the bus

An opportunity to use the latter technique presented itself after I observed a kindergarten lesson on the attendance count. This is a

daily routine during which students count to determine the number of students present (Pearson 2008). Before the whole-group lesson, the children had “checked in” using a system of numbered clips and Unifix cubes with an attendance chart. I watched as the teacher asked students to count off around the circle to determine how many children were present. In our follow-up meeting, I asked her to tell me about this lesson. I used such questions as, “I wonder what would happen if you asked your students if they knew a way to figure out the attendance count other than counting around the circle?” My goal in this coaching moment was to lead this first-year teacher to understand that she could support her students to be mathematical thinkers by allowing them to discover additional counting strategies. I wanted to create an awareness that a strategy need not always be dictated for the children to use during an activity. As we discussed the lesson in greater detail, this teacher decided to modify her approach, and I assisted her in thinking of ways to engage her students in a dialogue to share their ideas. To her delight, this classroom routine took on new meaning for her students as they came up with a variety of strategies to do the attendance count.

These coaching techniques—giving feedback, raising questions, and making suggestions—enabled me to help this teacher develop her expertise and foster student learning. In addition to coaching moves, several other topics addressed in West's book were of particular importance to me as a beginning coach, including diagnosing a teacher's needs and engaging in prelesson conferences, postlesson conferences, and coaching strategies.

### Professional learning continues

A second book I found valuable in my new role was a curriculum guide, *Developing Math Concepts in Pre-Kindergarten* (Richardson 2008). Because our preschool teachers develop their own curriculum, I gave a copy to each of them. According to research (Ginsburg, Inoue, and Seo 1999), children spontaneously engage in a large amount—about 40 percent—of their activities of “mathematical play” in a preschool setting. For this reason, I wanted to use Richardson's book as a resource with the preschool staff. In it, the NCTM Standards and



Principles are clearly outlined, and narrative sections detail current practice pertaining to preschool students. I was confident that these chapters of the book would help the teachers recognize teachable moments that naturally occur in the classroom and create developmentally appropriate lesson plans and activities that are based on the National Council of Teachers of Mathematics (NCTM) Principles and Standards (2000). The suggested activities are well organized according to topic (such as counting, sorting, measuring, etc.) and provide a framework to develop a well-rounded curriculum. The materials suggested were those we already use in our classrooms or could easily make, so budget concerns were not an issue. In our preplanning sessions, the teachers and I discovered a number of lessons that connected well with their pre-K curriculum. I centered our discussions around which activities to use to support their goals, the developmental needs of their students, and lesson design.

### On our way

During a unit on measurement, the teachers successfully used a particularly valuable idea from Richardson's book: The children compared the length of one of their hands to classroom materials. Earlier in the year, these students had worked on an All about Me unit of study. Using the Richardson lesson, the teachers were able to integrate a previous unit of study into their math curriculum, drawing on their students' prior knowledge and applying it to a new concept. They were also able to capitalize on a popular subject with preschoolers, namely, themselves! The children explored the classroom to find objects that were longer than their hand. A subsequent lesson asked them to find objects that were shorter than their hand. Each student brought one object back to the meeting area where the class discussed its findings. From a developmental standpoint, this lesson also worked well because young children usually focus on one attribute at a time.

Richardson's hands-on, play-based approach to math was a perfect fit with our early childhood philosophy. By discussing the activities in the book together with teachers, I could support them in trying new ideas and stating goals that were more explicit.



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### Pulling it all together

In addition to learning how to coach the teachers, I also had to adjust to my new role. Working with long-time colleagues made this easier in some ways but surprisingly harder in others. We are colleagues, but we are also friends. The school administration clearly wanted the math program to evolve, and that meant making some changes in the culture of teaching mathematics. This was not an easy task with so many teachers accustomed to their own ways of teaching. I have great respect for what the veteran teachers do in the classroom, but we also have a few teachers who are new to the school or in their first year of teaching. I was determined that I would commit to undertaking together this journey of creating a classroom culture of mathematical thinkers.

As September approached, I was nervous but anxious to begin. Historically, new administrators had met with little success when trying to institute curriculum changes soon after arriving. I realized that to ensure a positive outcome, I had several immediate goals on which to focus in my new role as math coach:

A preschool student explores pattern block designs.

trust, communication, and supporting the professional development of the teachers. First gaining my colleagues' trust would be key to fostering any real change. To that end, I spent the first few weeks of school observing and spending time in each classroom. I wanted to become familiar with each teacher's style and level of expertise, and the time allowed me to get to know the teachers and students. My presence in the classroom during math instruction showed the teachers my support of them and their students. In other words, we are in this together.

Communication was also critical to my effectiveness as a math coach. To meet this goal, I established consistent meeting times and endeavored to keep the lines of communication open. I set fixed meeting times with each grade level as well as with individual teachers (based on their needs) for prelesson and postlesson planning. I also met with teacher interns, who presented some of the lessons. In our meetings, I learned to ask questions and listen carefully to teacher responses. This technique to encourage teachers to voice their thoughts and ideas has been instrumental in my development as a math coach. It also allowed me to facilitate the conversation to discuss concepts and goals in depth. I learned what teachers thought, what they anticipated, and how they planned to foster student learning. Although I offered suggestions, I was mindful that my role was to help my fellow teachers do their best work, not to be their "boss." This could be a tricky balancing act for someone who had her own classroom for so long. I, too, have much to learn as I continue to develop my coaching skills.

### Gaining traction

An effective technique I use to support the professional development of teachers is the discussion of their teaching style and their lesson design. Our reflections involve ways to enrich the content knowledge of their students, how to address the "big idea" in the units, student achievement goals, classroom management, lesson materials, and differentiating instruction that supports the wide range of learning styles reflected by our students. We set a math schedule for collaborative work in the classroom, and we plan full-group, half-group, and individual activities. Some days may have a structured lesson; other days have a math workshop with a

variety of activities to choose from. The result of collaborating with the teachers in this way is that we are reaching our goals to further develop student learning and achievement in mathematics.

I have discovered that my engagement with so many different teachers and students keeps me quite busy. It is enjoyable and stimulating to work with a variety of age groups throughout the day, and the hours I spend in the early childhood wing and first-grade hallway fly by. I have come to realize the importance of being well organized. Keeping track of all these different teachers, their students, and the activities on a daily basis can be daunting.

### Maintaining momentum

When I am not in the classroom, I have significant work to do "behind the scenes." This might include reading curriculum books to monitor daily lessons, reading professional journals, or scouting for workshops and conferences to attend. I pay attention to new ideas or topics to explore to keep our program current, and I am a firm believer in integrating curriculum. I frequently use our school library as another resource, bringing books to a class that is working on a particular topic to integrate more literacy into the math curriculum.

I have now finished my third year as a math coach and have expanded my original pre-K–Kindergarten role to include working with the first grade. I feel fortunate that my early childhood colleagues and the students are so enthusiastic about the work we are doing in their classrooms. The teachers see great improvement, and students are enjoying their schoolwork more. Students in one particular kindergarten class told me that their favorite days were when I came because they knew that meant it was a "math day!"

We are off to a good start, but the teachers and I want to do so much more. It has certainly been more work than I bargained for but also a lot of fun. I get a warm feeling inside when a five-year-old stops me in the hallway and says, "Guess what, Mrs. C? I have a pattern on my shirt!"

Ah, another math journey has begun.

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