

Setting Up the Mathematical Community

Getting Started: Using the *Calendar* Routine to Develop a Math Community

Creating a classroom culture that allows students to share ideas, listen to, and learn from each other takes a great deal of thought and work on the part of the teacher. These skills and practices develop over time. The first month of school is when teachers begin to establish the classroom atmosphere that they would like to see unfold throughout the year. In this case, Michelle Rutherford reflects on her thoughts at the beginning of the school year.

There is much on my mind each September as the school bell rings for the first time, when a new set of 5- and 6-year-olds gathers in front of me on their first day of Kindergarten. I wonder, “Who are these students? What new adventures await us? Will I be able to excite their imaginations and their quest for knowledge and independence? How will I meet their needs socially, academically, and cognitively? What will be our successes this year? What will be our biggest challenge?” As I take a deep breath and begin my greeting, one thing is for sure, I have felt these feelings before; no matter how long I have been a Kindergarten teacher, I know the days ahead will be full of bursts of successes, some frustrations, and enlightenment for both myself and my students.

From our initial conversations in using the calendar and in taking attendance, I can tell that this group of students is eager to share what they know about numbers. The calendar is a focal point in the Kindergarten classroom, as many of my students are already familiar with it from their work in preschool. Students chime right in as I sing our days of the week song and are bursting at the seams to tell me what number they think is showing on the calendar for today. I feel like I have barely taken hold of the reins, and we are off and running at full speed. When I ask the students what they notice about the calendar, many seem energized by the question. Some are shouting out answers, others are eagerly waving their hands in the air, while still others seem silenced by all the commotion.

Jackie says aloud, “I see a 6.” I also hear Evan, “I have a calendar at my house. My birthday is in October. I am going to be 6.” At the same time Sandy turns to Janice, “I had fun at your birthday party.” The conversation is spontaneous, but I fear it may get away from us. Talk of birthdays can do this in a Kindergarten. While these vocal students are chiming in with enthusiasm, I see Carl, Will, Pat, and Debbie sitting more removed from the group. At the same time, Mike’s body is in constant motion, and Sharon looks like she may cry. I know that she already misses her family. How do all these students feel in this new place? Do they seem removed, anxious, or scared because they are unsure of what is expected? Is this an indication of their overall disposition to learning? It is so important to make room for all learners from the very first day.

I want so much to capture the natural curiosity and tap into the mathematical instincts of these Kindergartners. At the same time, my goal is to set the expectation that everyone has a role in these discussions and to develop a sense of responsibility toward self and others. These students seem so alive while talking about numbers and the calendar. All at once I want to know everything they know and think about numbers, but then I realize we have only been in school 15 minutes. How can I harness this positive energy, while making room for those students whom I can tell are already overwhelmed by this level of intensity around learning? One thing I know for sure: I need to quickly and consistently establish some expectations for who we are as a class, for learning and sharing, and for listening and speaking. I also know that our daily routines are opportunities to work on these expectations.

I use the *Calendar* routine as a time to focus on helping students build relationships with each other and engage in mathematics thinking and learning. Working as a whole class on the *Calendar* routine allows the tension that some students feel to come to the surface very quickly so that we can recognize it and begin to deal with it. I model how the routine works the first three days; then I select one helper per day to facilitate the routine for the class. Each day the helper leads the class in our days of the week song and then

determines which number comes next on the calendar as a way of determining the date.

By having one helper per day, the students come to anticipate that they will each get a turn and to recognize that they are expected to participate. The verbally precocious students learn to share the stage. The more reserved students learn that they are expected to take a turn, and that I am there, along with their classmates, to support them if they are hesitant, uncertain, or confused. Over time, the familiarity of the routine helps to ease the minds of those who are anxious.

Working with students on the *Calendar* routine seems so simple, but it is an important first step for setting a tone of inclusion, respect, and responsibility. The kinds of conversations that begin with our focus on the calendar also help my students learn that we will be talking a lot about numbers and math concepts in this class.

Michelle Rutherford uses the daily Calendar routine as a time to model her expectations for what participating in a mathematics community will entail, both mathematically and socially. By doing so, she helps her students develop the skills they will need to become mathematically powerful thinkers who are able to listen to the ideas of others and to explain their own strategies and ideas.

Questions for Discussion

1. As Ms. Rutherford observes her students' participation in the *Calendar* routine, what concerns does she express about the range of learners in her classroom? What specific skills does she believe all students will need to grow together as a mathematics community? How does she use this routine to help all students develop these skills?
2. What specific activities do you focus on at the beginning of the year to model your expectations for the type of community you wish to establish in your classroom?