

Setting Up the Mathematical Community

Who Are the Students in My Classroom? What Do They Think?

Nadia Cortes is a fourth-grade teacher. To create a successful math community for her students, she starts at the beginning of the school year to build a safe environment in which students can take risks and share their thoughts and ideas. Taking the first steps toward this goal, she plans a math discussion in which she asks students to describe the ideal or perfect math class. Her hope is that through this discussion her students will brainstorm a set of guidelines that will form the foundation for how they will operate in math class. When the discussion takes an unanticipated turn, she is surprised about what she learns from her students.

I asked my students to describe their ideal math class. To be able to work on class norms, I needed to know what their expectations and experiences were. It surprised me to find out how vulnerable they felt. It also astonished me that I was surprised by their vulnerability.

Mara started the discussion by sharing that having a perfect teacher would make a perfect math class. I asked her to describe what she meant, and the following conversation ensued.

Mara: If I don't understand something, she [the teacher] would explain things without getting mad.

Gilly: Yes, I hate it when I don't understand something. I said it to this girl last year, and she made this face [Gilly makes a face that looks incredulous], like how can you not get it? [Many kids laugh and agree with Gilly.]

Norma: And I hate it when the teacher says, "I should see all hands going up" because if your hand does not go up you feel stupid that you didn't get it.

Before I knew it, the focus had changed to "what problems do you find in a math class that is *not* going well?" My students became very excited during the conversation and needed to talk at length about their feelings. After awhile, I refocused them on how to address some of their issues rather than just complain. I wanted them to find solutions we

could all follow in the class that would help us build a productive math community.

I was dismayed at how fragile my students felt about math. I realized that I too had my mind on an "ideal class." In this ideal class students would come feeling strong and secure in their math ideas and would confidently tackle their errors. Strong kids, confident kids, secure kids. Instead, what I was looking at was fragility, delicacy, insecurity, and the fear of making mistakes—hiding mistakes from others for fear of being called silly or dumb. What experiences had cracked their confidence and opened wounds they needed to protect?

At this point, Ms. Cortes decides to talk with her students about her own feelings of insecurity when she works on mathematics with groups of adults. She lets them know that she is a learner as well, with similar feelings of fragility. Romina then initiates the following conversation:

Romina: Yes, I hate it when I don't get it, and it is not easy for me to say it.

Teacher: What can we do to allow you to say something? What would work for you?

Gilly: I would like to get help from anybody. So if I don't get it in class, then anybody, teacher or kid, can help me.

Teacher: What you're saying is that a class in which we all help each other, without making each other feel dumb, would help you learn better?

Gilly: Exactly! [Many students are nodding their heads in agreement.]

Norma: I hate it when kids say, "That's easy."

Teacher: What would work for you?

Norma: If they say it, we can say, "Can you explain it to me please?" If they know, they can explain it. If they don't, they are showing off and maybe they won't say it again. [The students laugh.]

As my students headed to their physical education class, I think they were relieved to take a break from thinking about how incompetent they can sometimes feel. But they were also excited because they were able to talk about these feelings openly. I think that this was an important conversation we had to have because we have all felt this way before. I hope they continue talking about these issues as they come up.

By giving students an opportunity to share their thoughts about what creates a perfect math class, Ms. Cortes allows them to participate in the development of classroom norms to guide how they will successfully work together. As she listens carefully to what the students are saying, she gains a lot of insight about her learners. Her keen attention to their comments allows her to go beneath the surface of their suggestions to understand why they are making them. This discussion not only gives the students an opportunity to develop norms; they also learn that they are in a place where their thoughts matter and they will be heard. As they move forward in their math work, and get to know each other better as individual learners with different needs, their community norms will have to be revisited and revised.

Questions for Discussion

1. What strategies might Ms. Cortes model for the whole class to help students feel safe to express confusions?
2. How can Ms. Cortes create structures to encourage students to help each other in respectful ways?
3. Have there been times when you have shared your own mathematics experiences with your students? What was your goal, and how did your students react?