

The Value of “Disagreeing”

As the school year begins, Kara Sawyer works hard to establish a community of learners in her classroom by establishing a set of values for this community. Ms. Sawyer recognizes that these values must be modeled and learned. She also recognizes that students may enter her classroom with different sets of beliefs and experiences about what some of these values imply.

I want students to understand about how we will learn together and the kinds of responsibilities such a vision requires for each member of the “community.” These responsibilities include the following:

- Revising and refining our ideas
- Building on each others’ ideas
- Recognizing the value of disagreement
- Becoming “learning listeners,” which means listening to understand, not just to be polite
- Taking responsibility for one’s own learning
- Paying attention to a partner’s needs and right to learn
- Growing and developing ideas *together*

A math class offers an important venue for highlighting these responsibilities and practicing them explicitly. An example from a math class at the beginning of the school year illustrates a way in which the class worked on developing an understanding of the “value of disagreement.”

There is much that students have to figure out about the complexities of working together to enjoy the advantages that can be gained from working with others. In small groups, we had just played the game *Capture 5*. Because the group work context was fairly new to many of my students and because there were some problems that surfaced within some of the groups, I wanted to hear their reactions and responses. Therefore, I asked my students to write in their math journals about what went well and what didn't go well in the day's math class.

When I read their journal responses that night, I noticed that many students thought that successful group work meant that people agreed with each other. Here are some of the things they wrote: "It all went really well. We all agreed." and "We didn't have any disagreements." In contrast, one student wrote, "We didn't agree at first, but then we worked it out." I decided to use this as an opportunity to highlight the difference between two types of disagreements: those in which people fight and those in which they disagree and work through their disagreements. I also wanted to help students understand that learning benefits can come from the second type of disagreement.

Before our math class the next day, I copied some of the journal comments onto chart paper without identifying the authors of the comments. We started with the most common type that equated a good math session with everyone agreeing. Then I stated:

I know it can feel very nice and comfortable to be in a group where everyone agrees, but the last comment on this chart really caught my attention, and I want us to talk about it.

I directed their attention to the comment "We didn't agree at first, but then we worked it out" and asked if they knew the difference between fighting over different ideas and disagreeing and working through those disagreements together. Many hands went up, so I asked two volunteers to do a quick demonstration of the first kind of disagreement, using *Capture 5* as the example. They improvised beautifully!

Student 1: I landed on 75. That means I have 5 markers and you only have 4. I win!

Student 2: (interrupting) Nooooo! You're wrong! You can't land on 75 with those cards. You landed on 74, so you don't get a marker.

Student 1: (interrupting) Nope. I'm right!

The bickering went on for a few more rounds (much to the audience's delight) before I began the debriefing. I asked them how they would describe what happens when people argue this way. The students' responses included the following:

They're being close-minded.

They're so loud; they disturb other people.

They don't listen to each other.

From the many volunteers, I carefully selected two students to demonstrate to the class what the second type of disagreement looks like. We used the context of the coin card game *Who Has More?* This demonstration was very different from the first. Each student listened to and responded to the other's ideas. They used our class way of disagreeing by saying, "I have a different idea. Let's try your way first and then mine and we'll see if we get the same answer."

The other students immediately noticed the key differences and expressed that these partners were "open-minded learners" who were civil and calm as they listened to understand each other's ideas. The impact of the demonstration was profound. The students could clearly see how fighting over different ideas gets you nowhere, while working through disagreements contributes strongly to learning new things.

Throughout the year, I hope we have many disagreements about the ideas we are discussing and developing in our math sessions. It is through these disagreements that our ideas are challenged and our learning is expanded. For our community of learners to benefit from the variety of ideas that we have, the classroom needs to be a safe place for sharing these ideas respectfully. I want my students to know that in our classroom, respecting the ideas of others isn't just about agreeing with each other. It also has to be about challenging ideas when we don't agree.

For many students, “disagreeing” has a negative connotation. In some households and communities, disagreeing, particularly with an adult, is considered rude and disrespectful. Countering the negative connotations of argument is an important part of establishing a mathematical community in the classroom. Ms. Sawyer helped her students recognize that expressing disagreements and challenging ideas are crucial elements in expanding the mathematical knowledge of all learners.

Questions for Discussion

1. Ms. Sawyer recognized that students' attitudes about disagreement could present an obstacle to the types of discussions she hoped for in the mathematics classroom. How was she able to get the solution to this “problem” to come from the students rather than from the teacher?
2. What attitudes about disagreeing might your students bring with them to the classroom?
3. How can you respect students' cultural norms while helping them recognize and utilize disagreements as opportunities for learning?