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Teacher Reflection: Critical for Equitable Discussions

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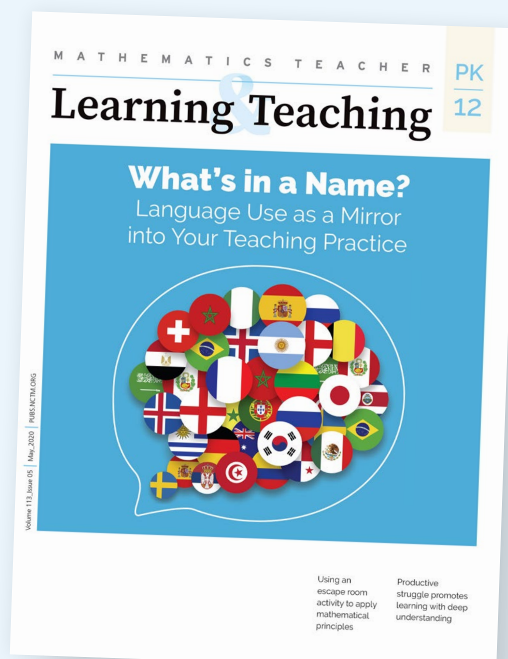

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Teacher Reflection: Critical for Equitable Discussions

Explore a teacher reflection tool designed to help K–5 educators foster equitable participation and a sense of belonging for all students in mathematics discussions.

Arusha Hollister and Lynne Godfrey

The whole-class discussion is a format used in many elementary mathematics classrooms, in which students and teacher(s) come together to clarify and synthesize ideas, listen actively, explore mathematical reasoning, and analyze misconceptions. Students have the opportunity to consolidate thinking, discuss work they have produced, make connections between representations, and pose questions. The whole-class discussion is a place where young children's mathematics identities form and may be reinforced or marginalized, and where students may or may not feel their ideas belong (National Council of Teachers of Mathematics [NCTM], 2020).

When looking at mathematics discussions through the lens of equity, questions arise: *Who* is contributing to the discussion? *Which* students' ideas are taken up? *Which* students are positioned as valued members of the mathematics community? *How* is discussion participation affecting status, authority, and belonging? *How* are teacher and societal biases affecting decisions about who gets to contribute? By examining such questions, we gain insight into how equitable discussions in our classrooms are and how they could be more equitable. Reflecting on questions like these requires time to step back and review what is happening in the mathematics classroom for all students. The teacher reflection tool described in this article provides an evidence-based method to examine these questions and then change practices to elevate and include all voices.

WHAT IS EQUITABLE PARTICIPATION AND WHY EXAMINE IT IN MATHEMATICS DISCUSSIONS?

Equitable participation in discussions means a variety of voices take part, all students feel welcome to share ideas, and all students listen to, respect, and engage with others' ideas. This can have an important impact on how students see themselves as mathematics learners (Russell, 2023). While participation in discussions is often equated with verbal contributions, contributions can have other forms, like sharing students' mathematical representations or students talking in pairs.

Must every student contribute to a discussion for it to be considered equitable? For students to feel included and valued? No. In fact, that would be patronizing, boring, and probably distracting from the thread of mathematical ideas. However, it is important for teachers to become aware of who is and is not contributing and work to remove participation barriers. These actions can move discussions beyond the voices of a privileged few to represent more fully the thinking of the whole class (NCTM, 2024).

In our experience, too often mathematics discussions are between the teacher and a few students, often the same few. Students who feel confident in mathematics and whom others perceive as "smart" are more likely to contribute, while those less confident and not perceived as smart often contribute less. As Horn (2012) wrote,

> Students with high status have their ideas heard, have their questions answered, and are endowed with the social latitude to dominate a discussion. On the other side, students with low status often have their ideas ignored, have their questions disregarded, and often fall into patterns of nonparticipation, or worse marginalization. (p. 21)

When we take time to reflect on what is happening in our whole-class discussions, we can disrupt perceptions and engage in rehumanizing practices that broaden our image of who does mathematics, whose strategies are worth listening to, and who authors new ideas. This supports the engagement of all students in important mathematics. According to Russell and Schifter (2024), "Without attention to how each student engages with the content, the depth of the mathematics makes no difference for too many students" (p. 1).

GETTING TO EQUITY: A TEACHER REFLECTION TOOL FOR WHOLE-CLASS DISCUSSIONS

Just like planning lessons, looking at student work, and analyzing assessment data, we believe regular reflection on access, equity, and belonging in the mathematics classroom is critical. Teachers' beliefs and instructional decisions can have a significant impact on

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students' participation (Horn et al., 2015). Structured reflection supports teachers in noticing patterns of participation and looking critically at instructional decisions (Reinholz & Shah, 2018). Teachers can then act to address participation inequities, which can help shift views of students and position them as competent mathematics learners (van Es & Sherin, 2008). To support this practice, as Reinholz and Shah (2018) write, "Researchers and practitioners need tools that can reliably, efficiently, and systematically illuminate these patterns of inequity" (p. 143).

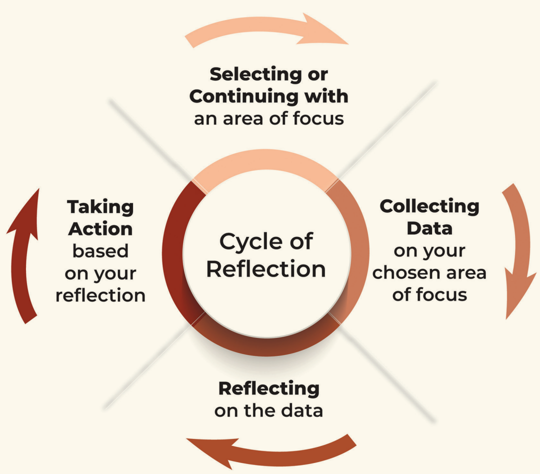
A team from the Forum for Equity in Elementary Mathematics collaborated with K–5 teachers from Massachusetts, New York, and North Carolina to develop and field-test a reflection tool to help teachers monitor equity in their mathematics discussions. Four essential elements make this tool effective in supporting equitable participation:

1. Evidence-based reflection, as memory can be faulty and lead to a false sense of accomplishment or overly harsh self-critique
2. Opportunities for ongoing reflection
3. Reflection not only on who is participating but on teaching practices that may affect participation
4. Space for teachers to not only reflect but also consider actions to take

The Cycle

The Teacher Reflection Tool is designed to be used in the cycle shown in Figure 1.

Figure 1 Cycle of Reflection



Through iterative cycles, teachers can see how their actions, based on data they collected, affect students' engagement. The Teacher Reflection Tool allows teachers to iteratively review and change instructional practices with all students in mind (Goffney & Gutierrez, 2018). As Tabatha, a collaborating teacher, put it, "The Teacher Reflection Tool helps you make sure your practice stays strong . . . It's easy to become automatic."

The Three Areas of Focus

The Teacher Reflection Tool for Whole-Class Discussions has three Areas of Focus that help teachers collect data and reflect on student participation and how it is influenced by actions of teachers and other students:

- Student Participation
- Questions Posed to Students
- Responses to Student Contributions

The tool starts with several questions to help teachers consider what is happening in their discussions and identify one of the three areas to focus on (see Figure 2).

In the following sections, we elaborate on each Area of Focus, drawing on experiences of collaborating teachers for illustrative examples. For the first Area of Focus, Student Participation, we describe the process of filling in the form and its structure (collecting data, reflecting, taking action), using the example of Delores, one of the collaborating teachers. This structure is consistent across all three Areas of Focus. For the remaining two areas, you will hear from two other teachers (Caroline and Yolanda) about their experience using the tool and the impact on their practice.

As you dive into these examples, keep in mind mathematics discussions in your own classroom and consider an Area of Focus you might select.

AREA OF FOCUS: STUDENT PARTICIPATION

Looking closely at who participates in mathematics discussions—and when and how—helps reveal equity issues in whole-class discussions. Those who speak, and speak often, tend to be seen by teachers and other students as mathematical thinkers. To afford all students the opportunity to be contributing members of their mathematics community, we can collect data on who contributes to discussions and then take action to elevate and include more students' voices.

Collecting Data: Student Participation Page

The Collecting Data page for the Student Participation Area of Focus helps reveal who participates and who does not (see Figure 3). Tally marks record data on how frequently a student shares with the class. The Forum team decided it was also important to collect data on students who wanted to share but were not called on. After a year of piloting, a fourth column, for "other ways student participated," was added at the teachers' request. This made clear that there are ways to contribute to a discussion beyond sharing verbally with the whole class and allowed teachers to capture this participation. Many teachers who used this tool collected data by videoing their discussions and recording data from the videos.

Delores's Collecting Data: Student Participation Pages

Look at the Collecting Data page from Delores, a third-grade teacher (see Figure 4; this early version did not include the fourth column). What do you notice about her data?

Reflecting Page

The Reflecting page for each Area of Focus prompts teachers to think about the data they collected,

Figure 2 Selecting an Area of Focus

(a)

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

SELECTING AN AREA OF FOCUS

Reflect on the questions below to help you select from one of the three Areas of Focus. Begin by considering the more general question. Then reflect on the questions specific to each Area of Focus. Use the corresponding links to go to your chosen Area of Focus.

What do you know or wonder about your students' participation in whole group discussions?

Area of Focus: *Student Participation*

Who do you think shares with the whole class during discussions? Who do you think rarely shares?

To focus on who is/who is not sharing with the whole class, go to:

Area of Focus: Student Participation PDF

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(b)

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

Area of Focus: *Questions Posed to Students*

What types of questions (open-ended, closed or non-content*) do you ask during discussions? Who do you think you call on to answer which types of questions?

*Open-Ended, e.g., How did you solve?; Closed, e.g., Agree/Disagree?; Non-Content, e.g., Read aloud the problem?

To focus on what questions you are asking which students, go to:

Area of Focus: Questions Posed to Students PDF

Area of Focus: *Responses to Student Contributions*

How do you think you respond to students' contributions? How do you think students are responding to each other?

To focus on how you and/or other students are responding to students' contributions, go to:

Area of Focus: Responses to Student Contributions PDF

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Figure 3 Collecting Data: Student Participation

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

COLLECTING DATA:
Student Participation

Date: ____________ Lesson(s)/Name of Discussion(s): ______________________________

Names of students in the class	Number of times student shared with the whole class	Student wanted to share; was not called on	Other ways student participated (turn and talk, chorale response, hand signals, etc.)

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investigate patterns they see related to students' identities (including but not limited to race, ethnicity, gender identity, multilingualism, neurodiversity, and academic status), and consider what could be contributing to those patterns (see the left-hand column of Figure 5). When using the tool for a second or third cycle, teachers look for effects from the actions they have taken.

The Reflecting page for the Student Participation Area of Focus asks teachers to reflect on specific questions related to the data they collected (see the top of Figure 5). These are important questions to consider when thinking about the social and cultural implications of who shares and about the effect on student learning.

When teachers who used this Area of Focus of the tool reflected on their data, they were sometimes surprised by students who raised their hands but whom they did not call on. Some expressed concerns about unconscious bias that may have affected their decisions.

Figure 4 Delores's Collecting Data Pages

(a)

Names of students in the class	Number of times student shared with the whole class	Student wanted to share; was not called on
William	did not raise hand	no
Jacob	1	raised hand 5 times
Matilda	1	raised hand 3 times
Leo	did not raise hand	no
Eddel	1	raised hand 4 times
Michael	1	raised hand 3 times
Zayb	absent	
Kai	0	raised hand 2 times
Evie	2	raised hand 4 times
Harold	1	raised hand 5 times
Alex	2	raised hand 5 times
Wendy	0	raised hand 5 times

(b)

Names of students in the class	Number of times student shared with the whole class	Student wanted to share; was not called on
Jahia	did not raise hand	no
Oliver	did not raise hand	no
James	0	raised hand 2 times
Tommy	2	raised hand 5 times
Azareel	1	raised hand 2 times
Maria	1	raised hand 4 times
Ivy	0	raised hand 3 times
Fabiola	did not raise hand	no

Figure 5 Reflecting: Student Participation

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

REFLECTING:
Student Participation

Lesson(s)/Name of Discussion(s): ______________________

	As you reflect on the data you collected, consider these questions: ▸ How many students shared with the whole class during the discussion? ▸ Did anyone dominate the discussion? ▸ Did anyone refrain from sharing with the whole class? ▸ Did anyone who wanted to contribute not get the chance? ▸ Did students who did not share with the whole class participate in other ways?
What did I find out?	
Are there any patterns related to students' identities, including but not limited to: race/ethnicity/gender identity/multilingualism/social or academic status in the class? What could be contributing to these patterns? (e.g., my own beliefs/biases, student's status among peers, student's confidence)	
If this is the 2nd or 3rd cycle with this Area of Focus, what, if any, effects have the actions I've taken had on student participation?	

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Delores's Reflecting Page

Look at Delores's Reflecting page (see Figure 6). What do you notice about her reflection? How is her reflection connected to what she knows about the students? In what ways are her reflections similar to your own?

Taking Action Page

For each Area of Focus, teachers are asked to brainstorm ways to incorporate what they have learned and choose one or two actions that could make their discussions more equitable. On the Taking Action: Student Participation page, they are asked to brainstorm questions about how to support more equitable participation themselves and how to engage the class in this effort (see Figure 7).

The goal is taking action that will broaden who contributes, enhance the mathematical discourse, and shift students' (and teachers') perceptions of students in the class as mathematics thinkers.

Based on Delores's reflection (see Figure 6), what are some actions you think she could take to encourage more equitable participation in her class?

Delores's Taking Action Page

Figure 8 is Delores's Taking Action page. What do you notice about her brainstorm and about the actions she chose? How are they connected to her reflection?

AREA OF FOCUS: QUESTIONS POSED TO STUDENTS

The types of questions teachers pose during a discussion shape how students participate, and *which* types are posed to *which* students affects how *individual* students participate (Reinholz & Shah, 2018). During a discussion, a teacher may ask different kinds of questions: open-ended, closed, and non-content (see the asterisk at the bottom of the Collecting Data page in Figure 9 for examples). Open-ended questions especially provide opportunities for students to engage in deep mathematical thinking. Each student requires opportunities to participate in discussions as active sense makers in cognitively demanding ways (NCTM, 2020; Reinholz & Shah, 2018).

A fifth-grade teacher, Caroline, used the Questions Posed to Students Area of Focus to reflect on who she was calling on to respond to certain types of questions (see Figure 9).

Before using the tool, Caroline shared how she thought she was posing questions.

> Originally when I saw that, I was like, Oh, I really make sure to ask kids a lot of different questions. I had a very high opinion of myself. I thought, I'm calling on kids, I'm really making sure

Figure 6 Delores's Reflecting Page

	As you reflect on the data you collected, consider these questions: ‣ How many students shared with the whole class during the discussion? ‣ Did anyone dominate the discussion? ‣ Did anyone refrain from sharing with the whole class? ‣ Did anyone who wanted to contribute not get the chance? ‣ Did students who did not share with the whole class participate in other ways?
What did I find out?	There were a couple of students who did not get to share who wanted to. Those that did were very confident and willing to share. From what I noticed no one dominated the discussion. There were a few who did not participate at all - no hand raised. These were some of the few that usually don't raise their hands in whole group discussions.
Are there any patterns related to students' identities, including but not limited to: race/ethnicity/gender identity/multilingualism/social or academic status in the class? What could be contributing to these patterns? (e.g., my own beliefs/biases, student's status among peers, student's confidence)	Two of the 5 students who didn't raise their hand at all are bilingual. A third did share once in beginning of the class but didn't volunteer for the remainder of the class (this student is also bilingual).

Figure 7 Taking Action: Student Participation

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

TAKING ACTION:
Student Participation

Lesson(s)/Name of Discussion(s): ______

Brainstorm ways to incorporate what you learned from the data you collected into your future work by considering a few of the following questions.

What can I do to bring unheard voices into our discussions? How can I help build the confidence of students who are hesitant to share? How can I help students feel their contributions to discussions are valued and important?	
Are there ways to broaden how students can participate in the discussion?	
How can I work together with the class to engage them in supporting more equitable participation?	

Choose one or two actions to take:

After taking action, conduct another cycle — collect data, reflect and take action, paying particular attention to any effects your actions have had on participation. After completing a few cycles, you may want to choose a different Area of Focus.

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> everyone's engaged. And that's kind of where I thought I was.

Collecting Data and Reflecting

Caroline then videotaped some discussions in her class. As she recorded data from the video and reflected on results, she was struck by the types of questions she asked one particular student.

> I think my focus tends to be on content and moving forward and getting to a whole-class understanding. Being able to record myself and look at it with the lens of who's being asked what, that started to be really eye-opening for me. I was noticing throughout my lessons a pattern of calling on the same person to read the learning target every time. And they weren't really engaging in many other ways. And while they were excited to read the learning target, and I knew it would bring buy-in for that student for that lesson, I wasn't doing my due diligence to show them as a sense-maker . . . [When] teaching, I thought, Great. You're ready. You're excited. You want to read the learning target. And then I watched it back and I thought, Wait. That's like all the sharing you did . . . And that just helped me realize . . . I wasn't giving [all students] the same types of questions.

Figure 8 Delores's Taking Action Page

What can I do to bring unheard voices into our discussions? How can I help build the confidence of students who are hesitant to share? How can I help students feel their contributions to discussions are valued and important?	I will be more attentive to those who are not participating - focusing more specifically on when they do not participate. Is it open response questions? Should my questions start off a bit more reachable and lead more into challenging ones? Is it language / vocabulary? Are students feeling comfortable in a small group, but in a large group is whenthey feel intimidated?
Are there ways to broaden how students can participate in the discussion?	
How can I work together with the class to engage them in supporting more equitable participation?	

Choose one or two actions to take:

I will definitely start my discussions from a turn and talk with specific students in mind. I will need to make my way into their small group discussions and pull their thinking into the larger group.

Caroline's experience highlights the importance of evidence-based reflection. What we think we are doing or remember doing is not always what is actually happening.

Taking Action

Caroline reflected on the data she collected and decided to make some changes.

> What I started to do then was think more strategically about the series of questions that I'm asking. When I say that, I mean having sense-making questions prepared, but then also having follow-up questions to support the sense-making . . . I wanted to make sure that I was providing all students access to critical thinking questions . . . I was able to rethink my teaching by thinking about what types of questions I was asking, but also for specific individual students, I could go up to them and I could say, "I'm going to ask you this question at the discussion." I could prime them. I could ask them that question in their small group to prepare them . . . [It] helped get those students ready to show that they are also sense-makers in the community.

After collecting and reflecting on the data, Caroline realized that she needed to more fully bring some of her students' voices and ideas into class discussions and have all her students' ideas seen as important. Caroline changed some questions she was posing, changed who she asked particular questions, and helped students prepare to respond during discussions (Hollister, 2024).

AREA OF FOCUS: RESPONSES TO STUDENT CONTRIBUTIONS

How teachers or classmates respond to a student's contribution may also affect the student. Does the teacher chart a student's idea/representation/solution? Connect a student's contribution to other solutions? Just move on to another student? Do other students ask questions about the contribution? Connect it to their own or other students' ideas? Ignore the contribution?

Depending on the teacher's and other students' responses, students may or may not feel others believe they have important mathematical ideas and make valuable contributions to the class.

Using the Responses to Student Contributions Area of Focus, teachers can examine their responses

Figure 9 Area of Focus: Questions Posed to Students

(a)

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

COLLECTING DATA:
Questions Posed to Students

Date: ____________ Lesson(s)/Name of Discussion(s): ______________________________

Questions I asked	Name of student(s) I called on to respond to the question	Type of Question*: Open-Ended, Closed, Non-Content	Notes (rationale for asking the question, the student response, etc.)

***Open-Ended:** How did you solve? Why? Say more? Compare?; **Closed:** Agree/Disagree?, Restate?, Yes/No; **Non-Content:** Read aloud the problem? Write the problem on the board? Hand out cubes?

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(b)

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

REFLECTING:
Questions Posed to Students

Lesson(s)/Name of Discussion(s): ______________________________

	As you reflect on the data you collected, consider these questions: ‣ What types of questions did I ask (open-ended, closed, non-content)? ‣ Who did I call on to answer which types of questions? ‣ Did the types of questions I asked bring multiple students' math ideas into the discussion?
What did I find out?	
Are there any patterns related to students' identities, including but not limited to: race/ethnicity/gender identity/multilingualism/neurodiversity/social or academic status in the class? What could be contributing to these patterns? (e.g., my own beliefs/biases, student status among peers, student's confidence)	
If this is the 2nd or 3rd cycle with this Area of Focus, what, if any, effects have the actions I've taken had on student participation?	

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Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

TAKING ACTION:
Questions Posed to Students

Lesson(s)/Name of Discussion(s): ______________________________

Brainstorm ways to incorporate what you learned from the data you collected into your future work by considering a few of the following questions.

What changes could I make to the variety of types of questions I ask to better support equitable participation in whole class discussions?	
What changes could I make to who I ask which type of questions to better support equitable participation?	
How can I support students in feeling comfortable and confident in responding to all types of questions in a whole class discussion?	

Choose one or two actions to take:

After taking action, conduct another cycle — collect data, reflect, and take action again, paying particular attention to any effects your actions have had on participation. After completing a few cycles, you may want to choose a different Area of Focus.

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to certain students' ideas and the possible effects of those responses, and make changes to how they are responding. They can also use this Area of Focus to examine students' responses to classmates' contributions (see Figure 10).

Collecting Data and Reflecting

Some collaborating teachers noticed in their data that students responded differently depending on who was contributing (Horn, 2012). When Yolanda, a fourth-grade teacher, looked at the Responding to Student Contributions Area of Focus, she became interested in how students' status played out during discussions.

> I was most interested in understanding how students perceived one another as either very strong mathematicians or students that the rest of the class did not take very seriously when it came to their mathematical thinking. I wanted to understand, during discussions, who is the class listening to and who is the class essentially indifferent towards.

When Yolanda collected her data, she found some students everyone seemed to listen to and take seriously, while for others, "no matter what they share, the class doesn't really pay attention to what they have to say."

Taking Action

Based on her findings, Yolanda decided to focus on students whose ideas the other students did not seem to take seriously and to take action to support their participation.

> During the work time, before discussions, I would go to those students and I would say, "Here's the question that I'm going to ask you. I will call on you during the discussion time. I'm going to ask you this question and I want you to talk about this part of your work." . . . I wanted them to know that they were going to be called on, and I wanted them to have a little bit of time to think carefully about what they were going to share with their peers.

Impact of Actions

Yolanda found the work she did to support these students before the discussion seemed to affect how students were responding to each other.

> When I started to do that, one of the things that I immediately noticed is that I was disrupting how students perceived one another as mathematicians. I wasn't calling on the students that everyone thought, "This is a strong mathematician, let's pay attention to this person." Instead, I was calling on the student that no one really was listening to. And because I was previewing the discussion with certain students, the students that no one was really paying attention to were participating in the conversations very confidently . . . It then forced the rest of the class to take those ideas seriously, because I was taking those ideas seriously, while making sure that those students . . . had an opportunity to reflect, to think about what they're going to share.

LIMITATIONS

We have shared accounts of only a few collaborating teachers, but these illustrate how teachers have used this tool to inform their practice. Through our work with teachers and reports from other educators, we have begun to learn about the possible impact of this tool, but further research is necessary. We plan to scale up the tool's use and study its effects by having teams of teachers and coaches engage in 12-week iterative reflection cycles accompanied by related workshops and then analyze data we collected as educators engaged in this work.

We believe the more routinely teachers use this tool, the clearer picture they will have of their students' participation, the impact of their instructional decisions, and opportunities to use their findings to bring about more equitable participation. However, we recognize that its use must be balanced with other responsibilities teachers have.

Teachers using this tool found it helpful in moving toward more equitable participation in discussions but also encountered challenges using it. For example, it is not really possible for a teacher to collect data while facilitating a discussion. Instead, teachers have videotaped discussions or had coaches, paraprofessionals, or students collect data—investments of more time and resources.

CONCLUSION

Ongoing examination and reflection on the diversity of student participation in mathematics discussions is

Figure 10 Area of Focus: Responses to Student Contributions

(a)

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

COLLECTING DATA:
Responses to Student Contributions

Date: ________________ Lesson(s)/Name of discussion(s): ______________________________

During a cycle you can choose to focus on how *you* responded to students' contributions, how *your students* responded to students' contributions, or *both*.

Name of student who shared	What this student shared	How I responded to this student (praised, acknowledged, charted, connected to other ideas, restated, asked questions, asked class for response, ignored, shamed, agreed/disagreed with)	How student(s) responded to this student (added on, agreed/disagreed with, asked questions, connected to own ideas, restated, ignored, responded disrespectfully)

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(b)

Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

REFLECTING:
Responses to Student Contributions

Lesson(s)/Name of discussion(s): ______________________________

	How did I respond to the students who contributed?	How did other students respond to the students who contributed?
What did I find out?		
Are there any patterns related to students' identities, including but not limited to: race/ethnicity/gender identity/multilingualism/neurodiversity/social or academic status in the class? What could be contributing to these patterns? (e.g., my own beliefs/biases, student's status among peers, student's confidence)		
If this is the 2nd or 3rd cycle with this Area of Focus, what, if any, effects have the actions I've taken had on student participation?		

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Teacher Reflection Tool: Equitable Participation in Whole Class Math Discussions

TAKING ACTION:
Responses to Student Contributions

Lesson(s)/Name of discussion(s): ______________________________

Brainstorm ways to incorporate what you learned from the data you collected into your future work by considering a few of the following questions.

What changes can I make to how I respond to students' contributions to support more equitable participation in whole class discussions?	
What changes can I make to how I respond to certain students in order to better support their participation in whole class discussions?	
How can I support students in how they respond to other students' contributions?	

Choose one or two actions to take:

After taking action, conduct another cycle — collect data, reflect, and take action, paying particular attention to any effects your actions have had on participation. After completing a few cycles you may want to choose a different Area of Focus.

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essential in teaching all students to view themselves as crucial contributors. By intentionally posing questions about instructional decisions and collecting data to determine whose ideas are being valued and which students are being positioned as mathematical thinkers, teachers can begin to assess the effectiveness of their practices on students' mathematics identities. Explicitly tracking this kind of data can help teachers "cut across the blur of memory and give better information about actual practice" (Godfrey, 2023; Wamstead, 2021, para. 8).

Evidence-based reflection can provide teachers with a sound basis to improve equity in mathematics discussions. Taking action based on these reflections can enable teachers and students to disrupt inequities in mathematics classes and therefore progress toward a more inclusive, equitable, and joyous learning community where each student feels they belong.

The Teacher Reflection Tool for Whole-Class Discussions and other free resources are available on the team's website: Forum for Equity in Elementary Mathematics (link online).

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