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# Democracy & Education

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## Middle School Mathematics Teachers’ Efforts to Foster Classroom Democracies.

A Response to *Creating a Democratic Mathematics Classroom*

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### Abstract

How can middle school mathematics teachers navigate their roles as authorities in managing classroom democracies while providing their students with opportunities to exercise their rights? The concept of complementarity (Vithal, 1999) acknowledges that a teacher’s authority is not always in conflict with students’ rights or agency, but instead a teacher’s authority can be exercised judiciously to invite students to enact their rights. In this response to “Creating Democratic Mathematics Classrooms,” we take up the authors’ invitation to reflect on how we consider the role of responsibilities in classrooms that promote Torres’s Rights of the Learner. We share ways that two middle school teachers work to foster their classroom democracies and explore tensions between the teacher’s authority and students’ rights during these practices: (a) engaging students in a democratic practice of writing a class set of rights and responsibilities, (b) constructing cold calling as a more democratic practice if students have choices for how to respond, (c) offering students an experience of a safe space to challenge their teacher’s authority in the context of group work, (d) transferring responsibility for learning onto students, and (e) inviting students to reflect on their rights to support students with learning to claim their rights.

### This article is in response to

Prasad, P. V., Kalinec-Craig, C. (2021). Creating a Democratic Mathematics Classroom: The Interplay of the Rights and Responsibilities of the Learner. *Democracy and Education*, 29(1), Article 2.  
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THE PURPOSE OF this paper is to respond to the article titled “Creating a Democratic Mathematics Classroom” (Prasad & Kalinec-Craig, 2021) by describing how two middle school mathematics teachers fostered their classroom democracies to promote rights of the learner (Kalinec-Craig, 2017). Torres’s Rights of the Learner offer a way to open up a classroom space so that learners can be valued as people as they experience opportunities to learn and grow. With these rights, students are explicitly welcomed to be confused, make mistakes, and when they express themselves in ways that make sense to them (Kalinec-Craig & Robles, 2020). Such experiences

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contrast directly with other mathematics classrooms where students are evaluated in terms of their capabilities with solving problems quickly and fluently (c.f., Schoenfeld, 1988). For learners' rights to thrive, teachers work to create a classroom community where students value each other and see strengths in one another.

In this paper, we describe how teachers can manage the development of their classroom democracies. The central question guiding this paper is: In what ways do two middle school mathematics teachers provide support for their students as they navigate tensions between their authorities as governing roles in classroom democracies and students' opportunities to claim and enact their rights in these classroom democracies?

*In this way, it is, and remains, the teacher's responsibility to manage the development of the classroom as it grows toward greater democracy and greater equity; it is teachers who ultimately decide what that looks and sounds like. This gives teachers a level of authority in the classroom that is inevitable and impossible to delegate, making it incumbent on teachers to notice and acknowledge the different forces that establish and reify status hierarchies between students (Buzzelli & Johnston, 2010). In this sense, teachers fill a governing role in classroom democracies (Prasad & Kalinec-Craig, 2021, p. 9).*

When teachers fill a governing role, they enact some authority over their students. These authoritative moves can either subvert students' rights or support students' rights. We seek to understand how we can how teachers can enact their governing roles in ways that continue to foster greater democracy.

In their original paper, the authors described "some of the challenges we have faced when considering the role of responsibilities in our classes that promote Torres's RotL in the hopes of encouraging others to engage in similar acts of self-reflection" (Prasad & Kalinec-Craig, 2021, p. 5). For our response, we took up this invitation for self-reflection. After we share our orientations toward mathematics learning and classroom democracies, we then describe two teachers' efforts to foster their classroom democracies: (a) engaging students in a democratic practice of writing a class set of rights and responsibilities, (b) constructing cold-calling as a more democratic practice if students have choices for how to respond, (c) offering students an experience of a safe space to challenge their teacher's authority in the context of group work, (f) transferring responsibility for learning onto students, and (e) inviting students to reflect on their rights to support students with learning to claim their rights. We reflect on these efforts by considering how teachers navigate tensions between their roles of managing a democratic classroom and promoting students' rights.

### **Our Orientations toward Mathematics Teaching and Learning**

We, the authors of this paper, all work to create middle school mathematics learning experiences that are centered on students' thinking and development of students' agency. The first author of this response, Amanda, is a mathematics teacher educator at a university in the Mid-Atlantic region of the United States, and she was formerly a middle school mathematics teacher. She teaches

future elementary and middle grades teachers and provides professional development to in-service secondary mathematics teachers. Lorianne, the second author, and Denise, the third author, are both middle school mathematics teachers in the Mid-Atlantic who are deeply invested in improving their practice. We are all committed to listening to and honoring students' voices in our teaching practice.

We view mathematics learning as a social endeavor that occurs within a classroom community. We do not view learning as transmission of knowledge from teacher to student. Rather, learning takes place as the learner interacts within a social environment (where the teacher is only one element) (D'Ambrosio, 1990). Learning and doing mathematics is a social activity. Common Core State Standards for Mathematical Practice include social activities, such as reasoning abstractly and quantitatively, constructing viable arguments, and critiquing the reasoning of others (National Governors Association, 2010). After all, "in the mathematics classroom, students do not only learn mathematics, they also learn to negotiate mathematical meanings . . ." (Voigt, 1994, p. 191). To learn mathematics, students must have opportunities to voice their thinking through enacting conceptual agency when students "take initiative in constructing meaning and understanding of the methods and concepts that are the subjects of their learning" (Gresalfi et al., 2009, p. 56). Integrating students' voices into the classroom to enact their agency in constructing their learning has implications for power and authority (Bartell et al., 2017). Whose voices are valued, and how can participation be equitable such that each student's voice is heard?

### **Rough Draft Thinking**

To work toward more equitable opportunities for students to participate in the mathematics classroom, we promote rough draft thinking. Rough draft thinking "happens when students share their unfinished, in-progress ideas and remain open to revising those ideas" (Jansen, 2020, p. 3). A process of welcoming students' in-progress thinking, or their rough drafts, and explicitly encouraging revision of mathematical thinking contrasts with mathematics classrooms where students are positioned as either correct or incorrect. Rather, when rough draft thinking is valued, teachers and peers attend to the emerging strengths in students' ideas and each student is given opportunities to grow through revising. By encouraging rough draft thinking, learning happens when students gradually revise their thinking in an iterative manner through discourse and reflection.

Rough draft thinking is equitable when we, as mathematics teachers, operate under the assumption that all students have brilliance, including in their early draft ideas. More students feel safe and welcome to participate when rough draft thinking is a part of mathematics class (Thanheiser & Jansen, 2016). Following Prasad and Kalinec-Craig (2021), we agree with tenets of Complex Instruction (c.f., Cohen & Lotan, 1995; 2014) such that teachers can work to purposefully disrupt hierarchies of academic competence within mathematics classrooms and strategically assign competence such that more students can be seen by peers as having

mathematical strengths (Jilk, 2016). We also agree with Hand (2012) that as students develop mathematical reasoning, they should experience that they have the right to take up space and share their thinking in progress.

We have found that Torres's Rights of the Learner is a powerful way to welcome students to take up space and share their rough draft thinking. The rights to be confused and make mistakes normalize that our rough draft ideas are welcome in the classroom. The right to say and represent ideas in ways that make sense supports students with how they communicate their thinking while it is still in progress. Rough draft thinking combined with Torres's RotL can generate greater equity because more voices will be heard, and it is also more likely that classrooms will be experienced as democracies because every student is more likely to feel encouraged to have their say.

### **Democratic Mathematics Classrooms**

Following Darling-Hammond (1996) and Sant (2019), we view democratic mathematics classrooms in two ways: education for democracy and education as democracy. Mathematics classrooms can be viewed as education for democracy in that they can be an instrument for learning skills and developing practices needed to participate in a democracy: skills to critically analyze the world (Aguilar & Zavaleta, 2012), practices of reasoned debate and arguing to defend a stance (Allen, 2011; Khuzwayo & Bansilal, 2012), and quantitative thinking (Allen, 2011). A mathematics classroom can also operate as a democracy, through engaging in collective decision-making processes that are fair, where every person has an opportunity to have a say (Ellis & Malloy, 2007). When mathematics classrooms operate as a democracy, students have opportunities to speak out against authority and challenge authority (Allen, 2011; Vital, 1999). Their agency can have a political dimension as students' voices authentically influence what happens in the classroom (Khuzwayo & Bansilal, 2012). When a mathematics classroom is run as a democracy, it functions as a social organization that accommodates multiple ways of thinking (Aguilar & Zavaleta, 2012).

Schools can also be problematic places to learn democracy (Darling-Hammond, 1996). Mathematics classrooms in particular have historically been used as a gatekeeper or filter that creates and reifies stratifications between people by race or gender (D'Ambrosio, 1990). Additionally, students' histories in school generally and mathematics classrooms specifically can lead students to expect the teacher to act as an authority (Vital, 1999), do most of the talking, and establish what is true. We acknowledge that efforts to create mathematics classrooms as democracies take place in this larger sociocultural context.

However, mathematics classrooms can also be ideal environments for engaging in democracy because they are unique spaces for learning to value multiple perspectives and learning to engage in reasoned debate. There can be many opportunities to understand multiple perspectives in mathematics classrooms (Allen, 2011; Ellis & Malloy, 2007): alternative solutions (How did someone else solve the problem?); alternative representations (What other diagrams, figures, tables, graphs, or words could be used to

illustrate relationships in the problem?); alternative explanations (What other ways of expressing or talking about an idea could make sense?); or alternative justifications (Is there another way to prove that a conjecture is true?). When students are asked to justify their thinking, mathematics classrooms are opportunities to engage in argumentation and reasoning.

Inspired by Prasad and Kalinec-Craig (2021), in the remainder of this paper, we share two teachers' efforts to foster democratic mathematics classrooms. These examples illustrate a dance between students' agency (as they enact their rights as learners) and teachers' authorities (as they manage the classroom space). Vital (1999) described authority and democracy as having complementarity rather than conflict in the mathematics classroom.

*In order to realise any kind of democratic life in the classroom we must assume and expect that there exist particular forms of authority. The authority that exists in a classroom is never absolute. Some expression of democracy is always present in how pupils react to that authority, even if that democratic action refers to resistance. One exists constantly in the context of the other as one form is always present when the other is handled. (p. 33)*

After all, "for there to be democracy, some kind of authority is necessary; these elements are complementary" (Aguilar & Zavaleta, 2020, p. 8). In the pages that follow, we explore examples from the second and third authors' classrooms that illustrate their efforts to navigate their roles in managing a classroom democracy such that they use their authoritative roles to create more opportunities for students to experience democracy.

### **Student-Authored Rights and Responsibilities**

In their efforts to build a democratic classroom culture, Lorianne and Denise promoted students' rights as learners by inviting students to draft rights and associated responsibilities for their classroom communities.

*What can be said of a classroom in which students exercise their rights as learners yet also have expected responsibilities to themselves and to each other? What complications are not considered that might further promote (or hinder) equitable participation for each student? (Prasad & Kalinec-Craig, 2021, p. 2)*

This paper provided an opportunity for us to reflect on complexities of having a list of responsibilities for learners.

We have found that when teachers are introduced to the rights of the learner, they want to generate an accompanying set of responsibilities. Aligning with Prasad and Kalinec-Craig (2021), we agree that responsibilities can lead to coercing students if they focus on accountability. Yet responsibilities can also orient us to support one another.

When Lorianne asked her students to draft their rights and responsibilities, she introduced a starting list of rights and responsibilities that her students expanded. Her school district had an initiative promoting rights of the learner and rough draft thinking among all of the mathematics teachers. The teachers were introduced to the following:



## Our Rights as Learners

You have:

- The RIGHT to be confused
- The RIGHT to make a mistake
- The RIGHT to say what makes sense to you
- The RIGHT to share unfinished thinking and not be judged
- The RIGHT to revise your thinking

The district also promoted a list of responsibilities:

## Our Responsibilities to the Classroom Community

Responsibilities:

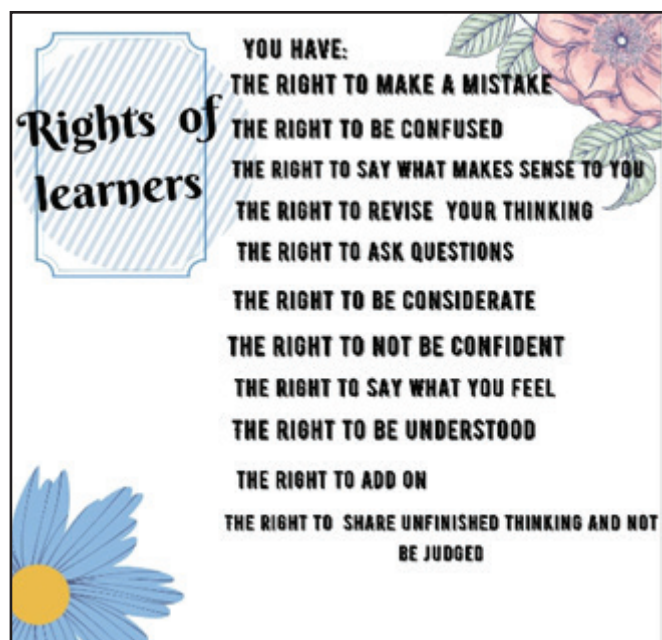
- Do not freeze each other in time; we are all growing
- Seek to listen and understand
- Assume ideas make sense
- Ask questions to clarify and support

Amanda, the first author, drafted and shared these rights (inspired by Torres's RotL) and responsibilities in professional development with teachers, and they were adopted by Lorianne's school district. Rights around unfinished thinking and revising were written to promote rough draft thinking. When Amanda shared this initial set of responsibilities, she intended to orient the idea of responsibility away from controlling behaviors (e.g., the responsibility to pay attention) and instead toward nurturing a community of collective knowledge building (e.g., Scardamalia, 2002). This set of responsibilities was grounded in promoting a strengths-based orientation toward one another, such as trying to understand each other and assuming another person's thinking has merit. Even the responsibility that directed students to a behavior (ask questions) was grounded in a supportive intention (to clarify and support each other). If schools were going to generate a set of

responsibilities, Amanda wanted to provide examples of responsibilities that sounded less coercive.

Lorianne's students drafted rights throughout the school year, adding new rights as they recognize that they want to claim them (see Figure 1). The students added rights, such as the "right to not be confident," as we often feel uncertain and unsure while learning something new. Also, the right "to add on" is helpful because one way that we revise our thinking is by extending our own thinking or the thinking of others. (This list was expanded regularly throughout the school year.)

Lorianne's students did not add many responsibilities to the initial list (see Figure 2). In Lorianne's classroom, students drafted one additional responsibility: "Go with your gut." This responsibility is a way to encourage sharing initial draft thinking. To enact this responsibility, students offered their brainstorm and rough draft ideas into the class discussion.



**Figure 1** Rights of a Learner in Lorianne's Mathematics Classroom

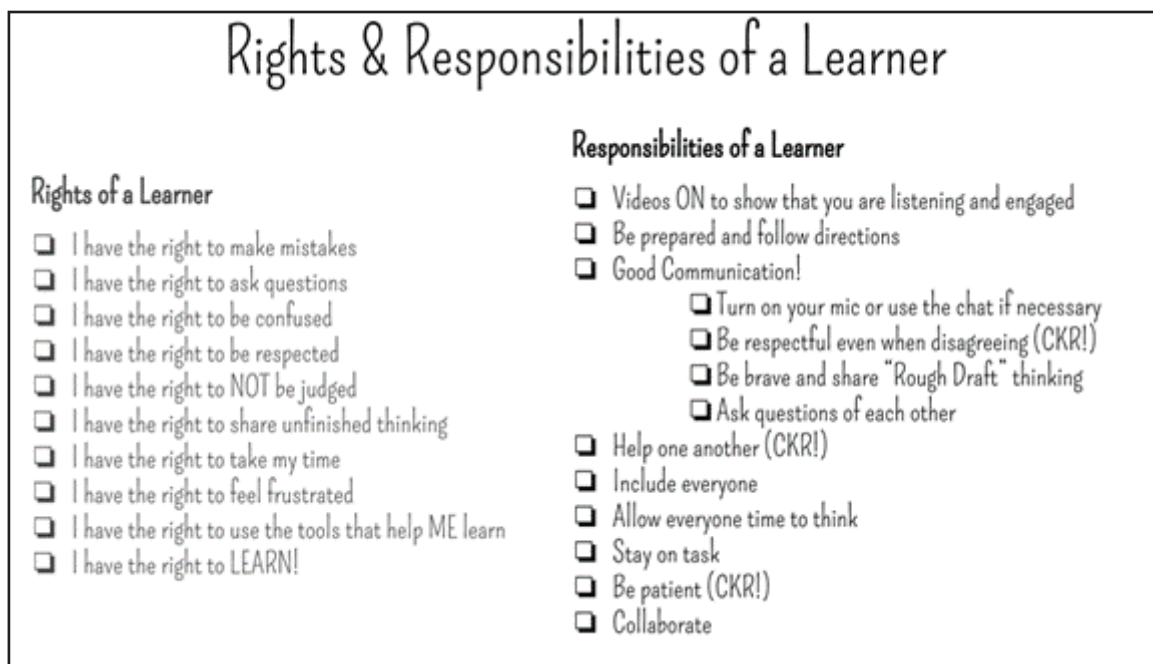


**Figure 2** Responsibilities of a Learner in Lorianne's Mathematics Classroom

Even the design of the graphics for the class rights and responsibilities was created by students. Originally the documents of their rights and responsibilities did not have graphics. One of Lorianne's seventh-grade students, Gina (all student names are pseudonyms), asked to meet with her after class about these posters. Gina was taking a graphic arts class, and she offered to revise these documents so that they could be "nicer" posters.

Denise and her students cowrote the list of rights and responsibilities generated by in Figure 3. She also provided her students with the initial set of rights from Amanda. These rights and responsibilities were written early in the 2020–2021 school year. Denise's students wrote their ideas for rights and responsibilities on a shared Padlet online, because classes were held remotely during fall 2020 due to the COVID-19 pandemic. ("CKR!" translates into "Care, Kindness, and Respect," which is Denise's school's motto.)

These teachers co-constructed their class rights and responsibilities with students to enact education as democracy; however,



**Figure 3** Rights and Responsibilities of a Learner in Denise's Mathematics Classroom

the teachers also managed the democracy. Denise distilled students' ideas into one list, because students' ideas consistently repeated and converged into similar rights across class periods. Denise invited reflection and discussion among her students, and they came to view this set of rights and responsibilities as theirs, no matter which class period they were enrolled.

Tensions between rights and responsibilities appear in the responsibilities that Denise's students drafted. We can see some of the responsibilities drafted by students as reflecting expectations of authorities managing their experiences in school, including having cameras on during online instruction. Denise conjectured students may draft responsibilities that reflect expectations that students have internalized from adults. At the beginning of the academic year, a school-wide expectation was established at Denise's school to turn on cameras during class.

Denise managed her classroom democracy by offering choices. She did not enforce a responsibility or requirement for students to show their videos during class. Instead, she invited students to enact their desires to listen and be heard through a variety of behaviors. She welcomed the use of the chat box rather instead of cameras and microphones. Daily in the chat box or by using their microphones to speak, students would interact in a number of ways: agreeing or disagreeing with each other, challenging each other, asking questions of one another, and supporting each other. These choices created a more democratic space.

Inviting students to draft rights and responsibilities demonstrates to students that we trust them. When students' voices are encouraged rather than suppressed, students can develop trust in their teachers and each other (Thornberg & Elvstrand, 2012). Inviting students to author their rights and responsibilities encourages students' voices to be heard.

### Re-creating Cold-Calling as a Democratic Practice

Cold-calling can be viewed as an authoritarian practice when teachers determine when students speak. Prasad and Kalinec-Craig (2021) rightfully provided caution when they wrote, "If teachers take up the notion of responsibility as accountability, they run the dangerous risk of policing the bodies and voices of students in their classroom" (p. 3). Lorianne navigated a tension between exerting authority through cold calling and fostering a democratic classroom by providing students with choices about how to participate when called upon and offering support for how to participate.

Lorianne strove to enact cold-calling to de-emphasize accountability and provide opportunities for students to enact their rights. When she called on students, she offered choices for how to respond, including: revoice something another student said, call on a classmate to share instead, or ask a question. She also offered students the right to say that they do not know, but she encourages alternative responses through prompts or sentence starters: "Can you please repeat that? I need more time to think about it." "I wonder about . . ." "I want to know more about . . ." "This makes sense to me because . . ." Lorianne also advocated for students to share something that someone else said today that made them think. Conversing about ideas might not be something students are used to doing, so her students benefitted from options and supports for getting involved in discussion.

If teachers do not judiciously draw students into classroom discourse, an equity dilemma arises. When students solely volunteer to participate, some might talk for a disproportionate amount of time. When a subset of students do not share their ideas, everyone's learning is potentially diminished (Shepherd, 2014). Lorianne called on students intentionally to invite them into the discussion if they had not recently spoken. She wanted students to know that she valued their voices and ideas. For a democratic

classroom to thrive, students benefit from learning about their peers' perspectives, so managing the democracy by bringing students into the discussion can honor students' rights by providing students with choices and support.

Democratic classrooms are a process of interacting that is grounded in ongoing relationships (Thornberg & Elvstrand, 2012). Students must experience that their choices are truly welcome. In Cline and colleagues' (2019) article about a kindergarten class's process of coming to choose and name a class pet, they highlighted the role of trust in constructivist learning. They explained that, to feel safe enough to share themselves and their thinking, students must feel important, accepted, and cared for within the classroom. Additionally, Cline and colleagues illustrated that trust in the classroom community emerged over time through meaningful interactions and relationships. Trust from students is earned. It takes time and action to earn students' trust.

Trusting students to make decisions that work for them also communicates hope in students. When we hope, we envision what could be possible, and we expect to attain it. The list of Torres's Rights of Learners is a vision. "And all visions require hope" (Appadurai, 2007, p. 29). A vision of a democratic education rests on constantly renewing a focus on equity (Singh & Sawyer, 2008). One way to think about equity is through equitable participation, such that every student has a voice in classroom discourse, every student has a role in collaboratively constructing powerful mathematical ideas and every student is able to be positioned as a knower and doer of mathematics (Esmonde, 2009). When we intentionally invite students to speak with the assumption that each person brings strengths to the conversation, we have hope in one another and in the potential of the classroom community.

### **Group Work as a Safe Opportunity to Challenge a Teacher's Authority**

Denise managed group work in her classroom by not objecting to students' choices if they opted out of collaborating. She noted that some students might not desire to work in a group or they might be distracted by being put in a specific group. Sometimes she let students pick their groups, and other times she randomly generated the members of each group. If a student wanted to work alone, Denise was flexible with her students and provided students with a safe space to practice speaking out against the teacher as an authority. Denise's approach aligned with Prasad and Kalinec-Craig (2021), as they wrote:

*We should resist the idea of responsibilities being a matter of compliance and accountability; if students do not choose to take up certain responsibilities in the classroom, it is inappropriate to punish them for it. Instead, teachers can use the idea of responsibilities of the learner to help student invest in each other and themselves (p. 10).*

What Denise found is that, after a student worked alone for a while, they eventually chose to collaborate with peers on their own accord. Rather than holding her students accountable to the responsibility of "help one another," she let students decide when they were ready to give help and receive help. Denise intended to communicate trust in her students through offering choices and

hoped that her students would grow to make choices that supported their learning and the learning of the classroom community.

Over time, Denise's students moved toward unity. Unity is a sense of wholeness or a feeling of being joined together. In a democratic society (and a democratic classroom), there is a tension between unity and diversity (Parker, 1997). One of the ways that this tension manifests is when students choose to work alone. According to Burks's (1997) interpretation of Dewey, an individual cannot reach "her fullest potential without increasing her social interaction. It also meant that society could not advance without free and full participation by all" (p. 100). Although some of Denise's students initially chose to work alone, they eventually felt a need to hear perspectives of others and to share their perspective with peers. These students initially enacted the democratic practice of challenging the teacher's authority and then valued collaborative work more when it was their own choice.

### **Transferring Authority for Learning to Students**

Lorianne and Denise strove to invite students to take charge of their own mathematical sense-making. They saw it as their responsibilities as teachers to allow students to own their learning process. They have experienced that their students learn more from hearing peers explain their strategies even compared to times when teachers explain the same strategies.

One tension that Lorianne has felt while sharing authority for making sense of mathematics has occurred when she records students' thinking for the public record on a white board or annotation space. What if students said something that was incorrect? She has committed to writing down whatever students say, even if she is aware that it is incorrect. This practice initially felt uncomfortable to her because students might assume that the ideas are correct if the teacher wrote them down in the public space. But she turned the determination of the validity of the ideas back to the class. As students engaged in discussion, they eventually landed where they needed to be, due to the internal logic of mathematics. The power was transferred to the students to revise thinking shared by peers, appealing to their rights as learners during this process.

Denise reported that students initially responded with frustration if the teacher did not resolve students' uncertainties. While working in groups, a student might raise his hand and say that he is confused; Denise simply says that this is his or her right and then walks away to provide the students with a chance to grapple with the ideas a bit longer.

An ungrading process is another way that Denise has shared authority with her students: students self-assess; then they complete problems on a math assessment. Denise gives qualitative feedback without a grade or score. Students then revise their math assessment and revisit and revise their self-assessment.

For their self-assessment, students evaluate their progress toward each learning target (e.g., "I can explain the relationship between lengths in a figure and corresponding lengths in a scaled copy."). For each of these learning targets, students assign themselves a level. The highest level (A) is Expanding, when they can teach others, apply the idea, and explain their reasoning. The next



level (B) is Proficient, which means they can solve the task without mistakes and can explain some of their reasoning. The Developing level (C) is when they can start the work, but the work needs improvement and they need to ask some questions. A Beginning level (D) means that they still need help and they do not understand yet.

Students are expected to draw upon evidence from their work to justify their learning levels in their self-assessments, and they revisit their self-assessments after they work on and revise their work on a math assessment. One student said that she gave herself a B for a learning target due to not being able to consistently explain concepts and struggling with some of the problems. Another student assigned himself a C because not only did he have a hard time explaining his work, he noticed that he made mistakes while solving. Some students found self-assessing to be motivating as they set goals for improvement, and other students acknowledged a tension between being honest with themselves about their learning while also wanting to give themselves high grades. Denise has committed to students evaluating their own work because too many students conflate performance (e.g., grades) with understanding, and they have experienced that teachers assert power over students through grading.

### Students' Reflections on Rights

Both Lorianne and Denise have treated the learners' rights and responsibilities as living documents. Students were invited to add new rights or responsibilities over time to their joint class lists. Denise added a right or responsibility to their list after students in multiple class periods recommend it. Lorianne added any rights or responsibilities recommended by any students.

As the school year progressed, Lorianne's students added rights such as "the right to feel overwhelmed," "the right to wait," "the right to feel welcomed," and the "right to participate." When her students have added rights, she would ask the class to think about what that right might look like and how it could add to a classroom community of intellectual safety.

Even if the rights and responsibilities remain static, they can be experienced as a living document when students are asked to reflect upon them. Lorianne asked her students to reflect during class through this prompt: *Which right of learners did you use today during math class? How did using that right contribute to your learning?* An example of a student response is "I used my right to make a mistake today. It helped me not dwell on negative stuff, and I could move on. I knew it was okay if I made a mistake because I could fix it."

Denise gave her students these reflection prompts:

*The right that is most important to me is . . .*

*The right that I would like to use more is . . .*

*Another right that I feel should be added to our list is . . .*

*One responsibility that I need to work on is . . .*

*These responsibilities are important because . . .*

*Another responsibility that I feel should be added to our list is . . .*

Although some students shared some rights that they would like added to their class list, most felt that their list was already

complete. Even the rights that were suggested by students simply seemed to be revisions or extensions of what they already had. Her students suggested adding these rights:

### I have the right . . .

*To not know, but not give up*

*To be curious*

*To feel not ready*

*To not give up!*

*To get help*

*To keep trying*

Denise appreciated that multiple students mentioned the rights "to not give up" and "to not know" or "not feel ready." These rights demonstrated that students see the importance of rough draft thinking and also that students have hope that they will eventually understand and learn if they take on the community responsibility to keep working, sharing ideas, and trying.

Regarding responsibilities, two responses stood out to Denise when students explained why their responsibilities are important:

### These responsibilities are important because . . .

*It isn't only helping you it is helping fellow classmates as well.*

*They tell you what's right instead of what's wrong.*

Both of these responses suggest that these students have recognized the community commitment of a sense of responsibility to each other rather than coercing each other to act in certain ways. The second response also indicates that they have an understanding that these responsibilities were not meant to be rules, but rather guidelines for success.

### Final Reflections

As we reflected on challenges associated with responsibilities when promoting Torres's RotL, we considered possibilities for addressing these challenges to promote a sense of responsibility to one another in the classroom community rather than using the notion of responsibility to coerce students' behaviors. To enact their classrooms as democracies, both Denise and Lorianne invited students to draft rights and responsibilities, but they addressed the challenge of creating shared classroom lists in different ways. Lorianne included everything her students offered to add to their lists, while Denise added a right or responsibility after multiple students' ideas converged. Lorianne addressed a challenge of encouraging more students to enact their voices by cold-calling, but to promote students' rights, she offered students choices for how they could respond. Denise's class had drafted the responsibility to collaborate. Denise navigated the challenge of certain students' preferences to work together alone by being open to students' choices. If students wanted to work alone, Denise did not object, and she found students eventually chose to collaborate on their own accords. Both teachers wanted students to take responsibility for their own learning. Lorianne encountered the challenge of the initial discomfort she faced when students shared incorrect ideas. She wanted to point out the errors. But she observed that, over

time, students eventually identified which ideas were more in line with mathematical validity. Denise faced the challenge of students viewing learning as performing for grades, so she shifted to use ungrading practices such that students self-assessed. Both teachers addressed the challenge of supporting students with learning to claim their rights by providing opportunities for students to reflect on rights as learners as they played out in their classrooms. Lorianne and Denise promoted students' senses of responsibilities to one another in ways that would not undermine students' rights.

*It is vital to acknowledge that classrooms are inherently hierarchical spaces; students enter school with the expectation that all the power and authority resides with the teacher. It is the responsibility of the teacher to cede that power and authority to the students. (Prasad & Kalinec-Craig, 2021, p. 9)*

We explored how mathematics teachers can exercise their authorities to manage their classrooms so that they become more democratic. Lorianne and Denise ceded some power and authority but also judiciously enacted some power to manage the learning experience in ways that could ultimately lead toward greater democracy. We continue to wonder about other challenges that teachers face when considering responsibilities associated with learners' rights and how teachers navigate their own challenges.

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