



ALL STUDENTS HAVE RIGHTS IN THEIR MATHEMATICS CLASSROOMS



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Published: November 8, 2024

Think about a math classroom, your own or one you have visited. We can view that classroom through two lenses: the **content** being taught and **how** that content is being facilitated coupled with how students are accessing learning. The content often comes from agreed upon state or national standards like the Common Core State Standards. There is much greater variance in how teachers teach and what educators prioritize differs profoundly. At All Learners Network (ALN) we believe all students deserve a welcoming and inclusive learning environment where differentiation, inclusion and equity are the central tenets. Further, we believe that all students are capable mathematicians. We address these tenets through a lesson structure consisting of Launch, Main Lesson, Closure and Math Menu. Throughout this structure the central focus is how we teach paired with the application of content. How we teach focuses on providing all students with opportunities to investigate and explore the content through a flexible and dynamic learning environment where students' rights as thinkers and sense makers are prioritized as a fundamental right to access. A right to have their voice heard and valued, to be respected as competent learners and where all students are afforded a multitude of opportunities to make choices, productively struggle and succeed.

All students have **rights** in their mathematics classrooms. They have a right to:

1. Make sense of math problems
2. Use math tools
3. Create models that make sense to them
4. Talk about their math ideas and hear about other people's ideas
5. Use their own words and ideas to explain their math thinking



6. Make sense of the numbers and equations in story problems
7. Look for and make use of patterns in numbers and problems
8. Look for, explore and explain patterns that will always work with numbers and operations

Sound familiar? They should. These statements are adapted from the Standards of Mathematical Practice from the Common Core State Standards for Mathematics. The Standards for Mathematical Practice describe these as “varieties of expertise that mathematics educators at all levels should seek to develop in their students.” (SSCC-M, 2010, p. 6) We believe the practices are the rights all students deserve to develop in every math classroom. These rights are meant to position students as owners of their learning and give them the agency to become purposeful and motivated, resourceful and knowledgeable, and strategic and goal-directed (CAST, 2024).

In my recent travels through elementary classrooms I have heard students say things like, “I’ll just wait for the teacher to explain it” or “That’s not how my teacher wants me to do it.” I once interviewed a 5th grade student to learn more about her understanding of additive reasoning. This student spent at least 5 minutes trying to make sense of and solve the problem, $384 + 228 =$

Here was our exchange:

Me - “Please read this problem, $384 + 228 =$, out loud and then solve it. You can use any of the math tools or resources you want to help you solve this problem.”

Student - “I won’t use the math blocks or cubes. We don’t use those in 5th grade.”

Student - “First I have to stack it.”

She wrote:

$$\begin{array}{r} 384 \\ +228 \\ \hline \end{array}$$

She proceeded through the following steps:

“Well, $8 + 4$ is 12, but do I put the 2 down and the one up or the 1 down and the two up?”

She decided on the following:

$$\begin{array}{r} 1 \\ 384 \\ +228 \\ \hline 2 \end{array}$$

Next, she said, “ $8 + 2$ is 10.” Again she grappled with which number goes ‘up’ and which is ‘down’. She decided on the following:



$$\begin{array}{r} 0 \\ 1 \\ 384 \\ +228 \\ \hline 12 \end{array}$$

She finished with "0 + 1 + 3 + 2 = 6," so:

$$\begin{array}{r} 0 \\ 1 \\ 384 \\ +228 \\ \hline 612 \end{array}$$

Do you see it? The right answer.
Is the goal of mathematics correct answers or conceptual understanding?

I then asked her, "how do you know 384 plus 228 equals 612?"

She responded immediately with:

"I know $300 + 200 = 500$

$80 + 20 = 100$, so that's 600.

$4 + 8$ is 12 so all together that's 612!"

I looked at her in awe and asked enthusiastically, "why didn't you do that right away?"

She looked at me quizzically and replied simply, "That's not what I'm supposed to do."

Are student rights evident and honored in this exchange?

This student's rationale is not unique. She, like many students, is stuck in a passive mindset about what it means to be a competent mathematician.

So, what can the system do to truly support this student? Education needs a shift. A shift from a teaching by telling system that places compliance and fidelity to programs to one of integrity with teaching and learning that is based on inquiry and conceptual understanding. These rights provide a scaffold for how educators can redesign and re-center their learning environments and facilitation in their classrooms to ideally reposition children from passive listeners (at best) to interactive and creative problem solvers in THEIR learning experiences. When educators structure their lessons to focus first on how students will engage with content, it provides greater opportunity to create accessible opportunities that will lead to greater access for all students to be successful with the content.



Educators must remember that their job is not to teach students to think like them, but to think for themselves.

To truly actualize equity and inclusion, students need to experience learning through these fundamental rights. The right to think, make sense of, struggle with, and find success in dynamic and flexible processes that allow them to achieve conceptual understanding. When we embrace the Standards for Mathematical Practice as Students' Rights, we highlight that it's not just the Content Standards that matter. We are truly interested in **how** students develop their understanding of the content too. That's the power we give to students through these rights.

What Now? Scan the QR code and scroll to the bottom of the post for links to next steps



1. Check out our All Learners Lesson Structure to learn how to create room for all students in your math block.
2. Watch the recording of our free workshop "Setting Up Your Math Classroom to Include All Students".
3. Bring All Learners Network (ALN) into your school or district for embedded professional development.

