

TODOS: MATHEMATICS FOR ALL

The mission of *TODOS: Mathematics for ALL* is to advocate for equity and high-quality mathematics education for all students — in particular, Latina/o students.

Centering Our Humanity: Addressing Social and Emotional Needs in Schools and Mathematics Classrooms

Abstract

In this commentary paper that follows our recent [Position Statement](#), we argue for prioritizing teachers' and students' social and emotional well-being as we prepare for the 2020-2021 school year. First, we **acknowledge** the realities and tensions. Next, we discuss **actions** for all educational stakeholders to take to prioritize the well-being of all people working in schooling systems. Finally, we offer suggestions on ways to hold ourselves **accountable** to community healing and mathematical learning, as well as suggest resources for educators.

Acknowledging Realities and Tensions

TODOS's recent position statement begins with an assertion that we are living through twin pandemics: COVID-19 and racism. We recognize that the COVID-19 pandemic has created new traumas (of isolation, disconnection, job loss, to name a few) and exacerbated others (such as increased domestic violence, food insecurities, lack of shelter), for all in our communities, in some way. The pandemic of racism has heightened awareness of police murdering Black people and has sharpened attention to how we are all impacted by racial trauma. These twin pandemics are especially impacting Black, Indigenous, and People of Color (BIPOC¹) communities. While we all may have experienced some form of trauma, we also acknowledge we are not all affected in the same way. We must acknowledge the ways in which traumatic experiences manifest in our schools, such as but not limited to microaggressions from teachers and peers based on race, disproportionate discipline rates, overidentification for interventions and special education services, as well as under-identification for advanced mathematics content.

We also acknowledge that as attention to social and emotional needs grows in school systems, educators are troubled by the implications of who is viewed as in need of social and emotional learning intervention (see, for example, [National Equity Project SEL & Equity statement](#)). We are troubled by the overidentification of Black and brown students as lacking regulation of their own emotions. We note a growing but underdeveloped discussion around the need for social and emotional learning among non-minoritized students, as part of learning to disrupt cycles of inflicting trauma on others. While many students need support to heal from daily and ongoing traumas, not all social and emotional interventions are in the best interest of all students. Ready-made/canned social and emotional interventions can often

¹In this paper, we use Black, Indigenous, and People of Color or BIPOC, which helps reframe racism from a black-white binary to include acknowledging native-invisibility and anti-blackness as key tenets of white supremacy. For more on this term, see <https://www.thebipocproject.org/>

implicitly center around white ideologies and imply that some people must be fixed rather than understood. Every individual defines and navigates trauma in a way that is unique to their experiences, and as such, will need to process and understand their trauma in their own unique way.

We also acknowledge that as we think about trauma, we must continue to come from an asset-based approach, and not think about trauma as something to be fixed. Shawn Ginwright (2018) takes a healing-centered approach, which is "strength based, advances a collective view of healing, and re-centers culture as a central feature in well-being" (p. 3) and focuses on reframing trauma in order to humanize those who experience trauma. One of the main points Ginwright makes is changing the question from what is wrong with you to *what is right with you*, thus aligning with our ideas of what it means to take a social justice approach to teaching mathematics, with a main tenet of eliminating deficit perspectives of students in mathematics (NCSM & TODOS, 2016).

We acknowledge that a one-size-fits-all approach does not consider the specific strengths of students, teachers, and schools. Instead, we encourage the following actions as overarching ideas that promote the development of a humanizing, antiracist mathematics community.

Actions for Centering our Humanity

We are quickly moving to the new school years with few answers on what instruction will be like. No matter the form (distance, in-person, or hybrid), when we start the new school year, we need to find a way to teach mathematics in light of the social and emotional needs of students and their families. Recommendations from the National Child Traumatic Stress Network (NCTSN), in an article posted by the Teaching Tolerance Staff (2020), include prioritizing *relationships*, as opposed to assignment completion and behavior compliance. Many states and school districts ended the year with a heavy focus on maintaining relationships and learning how to teach remotely. They so can now build on the lessons from last year towards humanizing/antiracist classroom communities.

Teaching Students Mathematics

In our call to action, we recommend shifting away from teaching mathematics *to students*, and toward teaching *students* mathematics. This approach begins with acknowledging the whole human, what Aguirre, Mayfield-Ingram and Martin (2013) call centering on students "in light of," not in spite of, their humanity (p. 9). In shifting our perspective toward students, we can work to humanize teaching and learning mathematics (de Araujo, 2018). As de Araujo states in her reflections of teaching high school mathematics, "With this new perspective, I found myself motivated and continually challenged to first know my students and then figure out ways to help them learn interesting and meaningful mathematics. It was always a challenge, and it was (almost) always rewarding" (2018).

We call teachers to action in making this shift of teaching *students* mathematics. We call on administrators to support teachers to make this shift. District leaders can help make this shift by resisting

unnecessary testing measures, supporting school teams to make their formative assessment plans with this in mind, and revising teaching evaluations to include feedback to teachers on how they are attending to the social and emotional health of students.

From “What to Teach” to “How to Be”

To aid in radical refocusing of classrooms from "what to teach" to "how to be," administrators and leaders must get used to the idea that the pacing-guide model is broken. We, teachers, have always had to race to cover content. Teachers cannot make the changes they need to make under pressure to conform to a system that privileges content over people. It is more critical than ever that mathematics teachers find ways to create relationships with all students in their class, especially those who are starting off the year in remote settings. In mathematics classrooms, teachers need to continue to maintain high expectations of their students; however, teachers could start each class by checking in with students, utilizing classroom community building routines and sharing how things are going, before launching into mathematical content. We also suggest that teachers find ways to recreate the informal spaces that they might usually rely on at school to make connections with students, such as office hours so that the small moments that aid in building relationships can be recaptured.

Safe and Brave Spaces – for Whom?

Along with these recommendations, the NCTSN (2017) also provides guidelines for all teachers to learn in their brief, *Addressing Race and Trauma in the Classroom*. One suggestion from this brief that we highlight includes creating and supporting safe and brave environments for students. We assert that this is a necessary action for antiracist mathematics classrooms. Along with creating relationships, we also need to create safe and brave spaces where students can share and heal. The NCTSN (2017) defines a safe space as "one that promotes feeling safe both within oneself and from the risk of physical or psychological harm from others" (p. 4) and a brave space as one "in which everyone is willing to take a risk in order to authentically engage" (p. 5). We draw on Ginwright's (2018) suggestions for taking a healing centered approach in practice, which includes starting by building empathy, encouraging students to dream and imagine, and building critical reflection and taking loving action.

We also urge teachers to ask the questions, "*For whom has my classroom traditionally been a safe space?*" and "*How can I ensure it is a safe and brave space for my most marginalized students?*" Recognizing how whiteness as ideology² permeates mathematics education in general, we suggest reflecting on, "*In what ways does my classroom reflect that Black lives matter?*" and "*How is my classroom built around the health, safety, and brilliance of Black, Indigenous, Latinx, and other historically oppressed populations?*"

² For more on what it means to recognize how whiteness permeates mathematics education as ideology, read Battey & Levya's (2016) article [A Framework for Understanding Whiteness in Mathematics Education](#) in the Journal of Urban Mathematics Education.

Healing-Centered Mathematics Teaching

To some teachers, these actions appear not to have much to do with actual work of teaching mathematics. We disagree and assert that they are essential to all aspects of teaching mathematics. In the mathematics classrooms, loving actions might feel like privileging relationship-building over content-coverage, creating flexible grouping structures that account for different students' pressing needs, eradicating the language of retribution (i.e., punishment) and implementing the language of restoration (i.e., healing) (Figure 1 below), and creating a *flexible* classroom culture (Hand, 2010) where teachers and students together co-construct the classroom agreements to allow space for students' self-expression. Such a classroom requires teachers to re-evaluate classroom management systems, routines that assert control over students, and ideas of reward and punishment.

Retributive Justice asks...	Restorative Justice asks...
What law or rule was broken?	What is the harm?
Who broke it?	What are the needs and obligations of everyone affected by the harm?
What punishment is deserved?	How will all the affected parties work to heal the harm as much as possible?

Figure 1: *Retributive Justice versus Restorative Justice*
 (adapted from [Oakland Unified School District - Restorative Justice](#))

One way to directly connect Ginwright's healing centered approach to mathematics is to draw on Kokka's (2019) framework of *Healing-Informed Social Justice Mathematics* (Figure 2), where she intertwines social justice, healing centered, and trauma-informed approaches in mathematics classrooms. Kokka (2019) contends this framework offers "a way for students to learn mathematics, gain sociopolitical consciousness and improve wellness" (p. 1199).

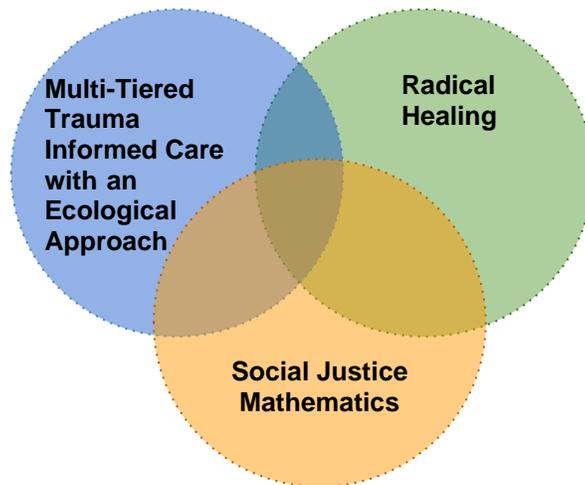


Fig 2: *Kokka's (2019) Conceptual Framework for Healing-Informed Social Justice Mathematics*

In addition, the Charles A. Dana Center at The University of Texas at Austin and the Collaborative for Academic, Social, and Emotional Learning (CASEL) (2016) wrote a brief on how to blend the Common Core State Standards for Mathematical Practice with social and emotional learning competencies (link in (re)source list).

Accountability to Students and Families

We need to hold ourselves accountable to a standard of doing no harm. This can happen by questioning who benefits from particular social and emotional interventions. It is too easy to police the actions of brown and black bodies in the name of helping them learn to control their emotions. This issue is particularly pertinent to mathematics classrooms, where rigid classroom behavior policies may lead to teachers pathologizing behaviors that are actually reasonable responses to an overly controlled environment or to a system of schooling that seeks to oppress students.

In the case of excessive control and disciplinary inequities, we can hold ourselves accountable using school, district, and state-wide data. We can invite trusted colleagues to observe instruction and provide critical feedback in ways that acknowledge teacher learning and growth. We must take a critical eye to the rates at which our students are being disciplined. When our data show racially disproportionate rates of disciplinary action, we must stop making excuses that place the blame on students and families that damage and demean their identity and instead hold ourselves accountable to improving our beliefs, behavior and actions. We must use multiple strategies to understand our own perceptions and understand our students rather than presuming that it is the student who lacks the skills to regulate their emotions. One way to do this is to pause before reacting, and ask ourselves, *"What need is the student expressing through this behavior?"* and *"Who else has this need?"* And if the classroom community space has been violated, instead of punishment, the question is, *"How is the community restored?"*

Leadership that Supports Student-Centered Mathematics Instruction

Leadership needs to be held accountable for the time and space needed throughout the school day and week to check in on the social and emotional well-being of all members in the school community. Such community health checks should include teacher to teacher, teacher to student, student to student, administrator to teacher, and teacher to family member and caretaker. School leaders must ensure that:

- Circle time or other structures are being used in the (virtual) classroom where students are provided the opportunity to share with the classroom community;
- Students have alternative ways to express needs privately, including but not limited to mental health questions on exit tickets; time to journal and reflect individually, which is not necessarily prioritized in middle or high school mathematics classrooms;
- Faculty meetings have structures such as small group discussions on how the week has been;

- Time is dedicated to teaching teams to do wellness check-ins about particular students and their families;
- Procedures and infrastructure are in place during distance and hybrid learning for students to set up a time with the teacher or another member of the school community in a safe space if they are feeling overwhelmed or triggered;
- A plan is implemented so that every person in the school community knows of and has ways to address their emotional needs safely.

Holding Space for Each Other

We know trauma is a continuum, and we need to be ready to support the social and emotional needs of teachers, students, parents, and all members of the school community. When we can safely return to our school buildings, regardless of when that may be, we need to recognize the anxiety and trauma teachers, administrators, staff, and students may have in leaving their homes, and the anxiety parents face allowing their students to attend schools. We need to ensure that time and understanding are given to those who are not comfortable with the return. Returning to school buildings brings new recommended public health norms, such as physical distancing, mask-wearing, and increased hygiene practices. We must take into consideration how to follow health recommendations in tandem with attending to social and emotional needs. We will all be adjusting, and we must recognize everyone will get used to this in their own time and allow the space for everyone in the school community to make this adjustment.

In this paper, we have parsed out the relationship between social and emotional needs and mathematics learning for the sake of discussing how to move forward. However, the reality is that human-centered mathematics classrooms hold the social, emotional, intellectual, and learning needs of students all at once – in creating community, planning instruction, selecting and implementing curricula, coordinating with families, etc. We have provided resources below, which outline ways to support the social and emotional needs of everyone in the school community. It is possible, with a humanizing perspective, to successfully provide this support in the mathematics classroom.

(Re)Sources

Aguirre, J., Mayfield-Ingram, K., & Martin, D. (2013). *The impact of identity in K-8 mathematics: Rethinking equity-based practices*. The National Council of Teachers of Mathematics.

de Araujo, Z. (2018, September, 25). Reflecting on what I do. *Mathematically Educated*.
<https://mathematicallyeducated.com/2018/09/25/reflecting-on-what-i-do/>

The Charles A. Dana Center at The University of Texas at Austin and the Collaborative for Academic, Social, and Emotional Learning (2016) *Integrating Social and Emotional Learning and the Common Core State Standards for Mathematics*.

https://www.insidemathematics.org/sites/default/files/assets/common-core-resources/social-emotional-learning/b_integrating_sel_and_ccssm_an_ideal_classroom.pdf

Ginwright, S. (2018, May 31). *The Future of Healing: Shifting From Trauma Informed Care to Healing Centered Engagement*. Retrieved from <https://medium.com/@ginwright/the-future-of-healing-shifting-from-trauma-informed-care-to-healing-centered-engagement-634f557ce69c>

Hand, V.M. (2010). The co-construction of opposition in a low-track mathematics classroom *American Educational Research Journal*, 47(1), pp. 97–132 DOI: 10.3102/0002831209344216

Inside Mathematics. *Social and Emotional Learning and Mathematics*.
<https://www.insidemathematics.org/common-core-resources/mathematical-practice-standards/social-and-emotional-mathematics-learning>

Kokka, K. (2019). Healing-informed social justice mathematics: Promoting students' sociopolitical consciousness and well-being in mathematics class. *Urban Education*, 54(9), 1179-1209.

NCSM & TODOS (2016). Mathematics education through the lens of social justice: Acknowledgment, actions, and accountability. National Council of Supervisors of Mathematics and TODOS: Mathematics for ALL. http://www.todos-math.org/assets/docs2016/2016Enews/3.pospaper16_wtodos_8pp.pdf

National Equity Project (n.d.). *Social Emotional Learning and Equity*. Retrieved from <https://nationalequityproject.org/about/social-emotional-learning-equity> on July 14, 2020

Teaching Tolerance. (2020, March 23). *A Trauma-Informed Approach to Teaching through Coronavirus*. Retrieved from <https://www.tolerance.org/magazine/a-trauma-informed-approach-to-teaching-through-coronavirus> on July 14, 2020

National Child Traumatic Stress Network, Justice Consortium, Schools Committee, and Culture Consortium. (2017). *Addressing Race and Trauma in the Classroom: A Resource for Educators*. Los Angeles, CA, and Durham, NC: National Center for Child Traumatic Stress.
https://www.nctsn.org/sites/default/files/resources//addressing_race_and_trauma_in_the_classroom_educators.pdf.

General Resources for Educators and Parents:

National Child Trauma Stress Network (<https://www.nctsn.org/>)

Teaching Tolerance website (<https://www.tolerance.org/>)

In Particular, Supporting Students Through the Coronavirus: <https://www.tolerance.org/supporting-students-through-coronavirus>

The Collaborative for Academic, Social, and Emotional Learning: <https://casel.org/>
In particular, read CASEL's roadmap for reopening schools:
<https://casel.org/reopening-with-sel/>

Civil Rights Data Collection: Data Snapshot: School Discipline:
<https://ocrdata.ed.gov/Downloads/CRDC-School-Discipline-Snapshot.pdf>

The Hidden Cost of Suspension: How can kids learn if they're not in school?
<https://nces.ed.gov/programs/maped/storymaps/oss/>

School discipline data indicators: A guide for districts and schools
<https://files.eric.ed.gov/fulltext/ED573680.pdf>

Addressing Race and Trauma in the Classroom: A Resource for Educators:
<https://www.schoolcounselor.org/asca/media/PDFs/FINAL-Race-and-Trauma-in-the-Classroom-Factsheet.pdf>

The Future of Healing: Shawn Ginwright's article in Medium, accessible to a variety of audiences
<https://medium.com/@ginwright/the-future-of-healing-shifting-from-trauma-informed-care-to-healing-centered-engagement-634f557ce69c>

Restorative Justice Implementation Guide: Whole-School Approach from Oakland Unified School District
<https://www.ousd.org/cms/lib/CA01001176/Centricity/Domain/134/BTC-OUSD1-IG-08b-web.pdf>

Examples of Social and Emotional Learning in Elementary Mathematics Instruction:
<https://www.casel.org/wp-content/uploads/2017/08/SEL-in-Elementary-Math-8-20-17.pdf>

Humanizing Online Mathematics Teaching: A Recorded Presentation by Mary Raygoza, Kelsey Macias, and Nima Harirchian as part of NCTM's 100 Days of Professional Learning, Invited by TODOS Mathematics for All
<https://nctm.wistia.com/medias/7fdcdfu5pc>

List of Resources for Teaching Mathematics and Science for Social Justice, by Kari Kokka
<https://bit.ly/SJMathScienceResources>