



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.

Black, Indigenous, and Latinx Parents as Partners in Mathematics Education

Abstract

In this follow up commentary to our position statement, we address the radical restructuring of school-parent relationships. It is well known that parental involvement in schooling is essential for student success, yet in mathematics education, we do not embrace the knowledge Black, Indigenous, and/or Latinx parents bring to their children's schools. In this paper, we first **acknowledge** that centering on Black, Indigenous, and Latinx parents is a necessary pathway forward into mathematics education during our current COVID-19 crisis and beyond. We suggest **actions** for school leaders, teachers, and parents to take to make a new partnership a reality. Finally, we describe **accountability** measures to ensure that Black, Indigenous, and Latinx parents are brought from the margins to the center in mathematics education policies and pedagogy.

Acknowledging the Need to Redesign Parental Engagement

The COVID-19 pandemic illuminated the inequities that afflict our education systems, particularly for low-income students and students of color. “Teacher” (and librarian, PE coach, etc.) was suddenly added to the list of parental¹ roles. Suddenly schools, which are still held in our country’s ideal as the equalizing places in our American democracy, were not the center of education, community, and social services that they usually are. We acknowledge that school systems across the country were differently prepared to continue some form of emergency remote teaching² when most of the country moved to shelter-in-place, and that the differences were largely based on the economic situation of the school districts. But we also acknowledge that parents, teachers, and school leaders working together is another formula for weathering violent transitions such as the ones we all faced in March.

Therefore, we acknowledge that the twin pandemics of COVID-19 and racism have exacerbated a need to rethink the relationships of parents to systems of schooling entirely. Teachers do not spend the time that parents do with their own children, in particular now that schools are in distance-learning and hybrid modes. We also acknowledge that this decrease in formal school time has resulted in frustration for some parents, who found that supporting their children to learn mathematics at home was perhaps most particularly challenging of all the content areas.

¹ In this paper we use the word “parent” to mean any and all individuals who are responsible for the care of children, whether the relationship is formal or informal. We recognize there are a variety of ways to parent children, whether or not such relationships are recognized legally.

² More on remote crisis teaching as terminology: <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>

We also acknowledge that due to patriarchy embedded in our society, mothers or mother-figures, in particular, have taken on most of the burden of constantly being available to their children. This resonates with us viscerally as most of us working on this commentary are mothers. We also acknowledge that Black, Indigenous, Latinx, or families from other economically and educationally oppressed communities may be saying at this moment, “We don’t have time for math. We are trying to survive over here.” We know that all parents fully support their children’s education, yet Black, Indigenous, and Latinx parents disproportionately face barriers to participate as much as they might like.



Finally, we acknowledge that parental involvement in school is often a one-way street, with parents positioned as recipients of knowledge to support children at home to do better at school. Where parents do advocate for their own children, such as attempts to disrupt the school to prison nexus (Stovall, 2018), they may be labeled as troublemakers. Programs on family engagement are often isolated from district initiatives. Staff leading these programs often work in a silo, not in collaboration with other district or school

departments. And in the absence of such infrastructure, educators struggle with building authentic partnerships with parents, guardians, or caregivers, beyond tracking the number of participants attending events. Jeynes (2013) found that programs that ‘fostered increased communication between parents and teachers’ were one of four types of parental involvement models that had statistically significant or positive effects on student outcomes. This research, in part, shows that parents were key in pre-COVID 19 schooling and their meaningful involvement will play a larger role in their children's education (younger children, in particular) during school closures and within hybrid learning structures.

Actions: Towards Genuine Partnerships with Parents

While we acknowledge that the larger system of schooling is in need of an overhaul in terms of families and school relationships, we focus our recommendations on those we see as most impactful to the teaching and learning of mathematics. Given the acknowledgments of our current moment above, our overarching theme is reshaping the relationship between school and home. We suggest the following actions:

Actions for Educational Leaders

Cultivate Trust, Respect, and Transparency

Communication has been a key factor in bringing teachers and parents together (Westmoreland, Rosenberg, López, & Weiss, 2009). In our current moment, we might say *transparency* is a key factor in parents' understanding of what goes on at school, as well as engagement of parents and families in policy and even instructional decisions.

In particular, in the context of mathematics, appeals to the culture-free nature of mathematics and its supposed superiority to other ways of knowing can aid in maintaining a system of power in which only school officials (like teachers and administrators) are seen as experts.

Often, those school officials are white, serving schools with large populations of Black, Indigenous, and People of Color (BIPOC) who have systematically been excluded from high levels of mathematics. The intersections of these two issues of the assumed neutrality of mathematics and the prevalence of racism cannot be ignored as we move forward in the unknown of the 2020 school year. We

will not solve this issue right now. It is bigger than mathematics education itself. We urge all educational leaders and teachers to prioritize doing the self-work of understanding how we are complicit in a system of oppression named schooling, and what our roles are in dismantling and rebuilding this system³ – ultimately moving towards healing deep wounds. This work must be undertaken with parents as partners and parents from historically marginalized groups in particular. A step in this process is valuing the home mathematical practices of parents, in particular BIPOC parents, and finding ways to bridge from home experiences to school knowledge, and not vice versa (see our list of resources for this at the end of the commentary).



“Mi Familia” by Nico, age 7

Provide Parents and Schools with Resources

Provide resources and support to families during and after school disruption, especially in mathematics, which often show the steepest losses over summer and time outside of school (Quinn & Polikoff, 2017). Resources should include materials, such as the devices mentioned in our opening section, as well as support directed specifically at parents.

Integrate family engagement with each district’s learning goals by creating a district-level family engagement team to work with families with explicit attention to mathematics. Promising practices have emphasized the critical role that districts play in efforts to engage families (Westmoreland, Rosenberg, López, & Weiss, 2009), including creating infrastructure for district-wide leadership for family engagement, in particular through allocation of Title I funds, which could involve parent leadership

³This reflection from *Embracing Equity* is geared towards white people who are newer to ideas of dismantling systems of oppression
<https://embracingequity.org/blog/2018/11/2/let-us-work-together-the-role-of-white-co-conspirators-in-dismantling-systemic-racism>

institutes, professional development for supporting family engagement, and accountability measures to evaluate the effectiveness of involving families that reflect the demographics of the school district. However, few district engagement models focus explicitly on mathematics education, particularly with families from communities of color, especially in ways that position parents from marginalized communities as intellectual resources for teaching mathematics (Civil & Menéndez, 2010; Ishimaru, Barajas-López, & Bang, 2016). One such model is the work of the *Math and Parent Partners* program (MAPPS). Latinx parents were repositioned as resources for mathematics learning, while also developing understanding and navigating the academic mathematics privileged in schools. Programs like MAPPS could lead to families and district/school-level teams working cohesively to plan, implement, evaluate, and continuously improve student outcomes while transforming the culture of whose mathematical knowledge counts within school settings.

Actions for Classroom Teachers

Invite Parents into the Teaching and Learning Process

Black, Indigenous, and Latinx parents have a lot to offer classrooms; however, they are not always asked to join and be a part of the instruction. Ishimaru, Barajas-López, and Bang (2105) has argued for the involvement of parents from nondominant groups in schooling not as passive recipients of knowledge, but as “expert collaborators and fellow leaders.” (p. 14). Given our current expectation of online and hybrid classes, schools can develop an online learning culture leveraging school/home connections that support mathematics identity and agency for students and parents. Research on Latinx parents visiting classrooms suggests that observations and debriefs of classroom visits were one way that parents were able to both reflect on ways to support their students and develop leadership in mathematics education (Civil & Menéndez, 2012).

Online and hybrid teaching models may open new opportunities for parents to participate in schooling because of the online nature; however, this cannot be expected as absolute. Schools must lead by reaching out and making space for parents to share their knowledge as well as their hopes, needs, and desires for their children. A starting point is to invite parents to sit-in on live online classes regularly or invite them to make videos to share with your classes on relevant topics. Platforms like Slack, WhatsApp, Microsoft TEAMS, and Google Classroom have ways to keep ongoing chats between parents and teachers on topics related to all kinds of mathematical concepts, without requiring membership to online social media, such as Facebook. However, to use such platforms, school districts will need to clarify the privacy issues that may be associated with posting to these formats.

We also argue that this year of distance and hybrid learning is a chance to restructure assessment and involve parents in assessing aspects of the learning of mathematics, such as students' attitudes towards mathematics, access to materials in the home, and engagement in out-of-school mathematical practices. For more on involving parents in assessment, see our assessment commentary paper [*Student and Family-Centered Mathematics Assessment*](#).

There are other ways to bring families into mathematical spaces that are not necessarily classroom spaces. For example, the American Institute of Mathematics (AIM) has been hosting online webinars for parents and students to support engagement with mathematics via online spaces. They offer free events, with more information at their [Math Communities website](#).

Organize with Parents

In some schools, there are formal structures for teachers and parents to build community together and work towards common goals. Parent-Teacher Unions (PTUs) are one such example, as well as Parent-Teacher Associations (PTAs). While umbrella organizations like PTUs and PTAs have their own equity issues (for example, barriers to participation from parents who work during meeting times, or lack of translation services), they can also serve as starting point for parent organizing with teachers' support.

In addition, teachers can seek genuine partnerships with the Black, Indigenous, and Latinx parents in their communities around social justice issues. Melissa Adams-Corral wrote about how, when she was a teacher, she started family meetings with her mostly Latinx parents to build community between parents, and to have space to talk about how their children's (her students') mathematics learning was progressing. Over time, the parent-teacher meeting space began a tool for organizing against a policy that disproportionately negatively impacted their children: tracking in middle school mathematics classes. ([You can read her full article in Medium here](#)).

Actions for Black, Indigenous and Latinx Parents

Here we would like to speak directly parents-to-parents, especially our parents from marginalized communities, our BIPOC and Latinx parents who are frustrated with a school system that does not reflect their lived realities, and who have experienced frustration with math themselves.

Trust Yourself

We (the parent-authors of this paper) are struck by how quickly we can doubt ourselves when faced with an issue that impacts our own child in school, rather than issues we face in our jobs as educators and teachers. The love and the nature of the relationship between parents and their kids are unique. Thus, we



"African Savanna" by Olive, age 12

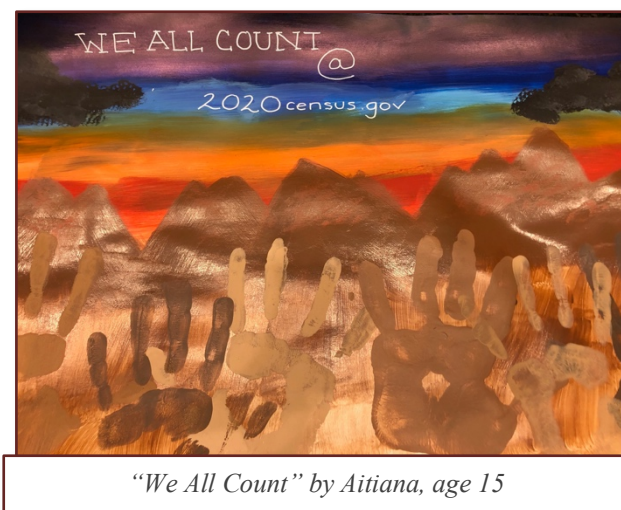
must trust ourselves. Many of us are dealing with our own trauma from past mathematics experiences, including teachers who dehumanized us (e.g., who made us feel incompetent). We might think we do not know mathematics at all.

It is true that there are some ways of teaching mathematics that we might not have experienced as students. However, we parents know a lot. We have all the ways we learned to do mathematics and the ways we have created as part of our lives. We can help our children develop a love of and

curiosity for mathematics. We can genuinely say, "I don't know, let's figure it out" when faced with mathematics we have not thought about in years. We can model problem-solving every day. It is time to re-write our *mathematical stories* (Adams, 2018), and build the agency and positive identities of our children.

Organize and Advocate as a Community

We can also organize among and advocate for ourselves. We do not need to wait for the school to start conversations among us. We can virtually and safely in this time of social distancing meet and talk about our concerns, questions, strategies for supporting mathematical learning, and our needs. We can make a network of support for each other. In schools where there is a lot of economic, linguistic, and racial diversity, equity issues will certainly come up. However, mathematics can be a tool for connecting. Parents can connect and organize around their strengths in learning and teaching mathematics (see for example, Caspe & López, 2018, engaging families in STEM learning), and similar experiences with frustration or love of mathematics. Like any community, a parent community will take time, effort, failures, and successes to cultivate. We have much to gain by starting conversations among ourselves, especially given the isolation that many parents felt when schools suddenly closed this past spring. We can build the connections we need now so that our community is intact as we get further into a school year with many unknowns.



We encourage each and every parent to cultivate trust in themselves to engage in mathematical thinking and model for their children how to be curious about mathematics, to help shift the culture of doing mathematics towards one that values all of us and the ways we think, versus solely memorized procedures done quickly and accurately. And we encourage parents to enter into a dialog with teachers, to ensure that teachers and administrators do their part to value the mathematics that parents from marginalized communities *do* know, and not pit home mathematical practices against school mathematical practices. Rather, the goal is to cultivate mutual understanding and respect for multiple methods of engaging with mathematics.

Accountability to Families and Communities

We call on school site administrators, district offices, and county offices of education to bring the stakeholders to the table and make the infrastructure for what you would like to see. We have to include the voices of parents and students in making these new systems a reality. Yes, families need information from the school; however, often, this is where it stops. Rather than a one-way flow of information, we should take up the two-way flow of trust and transparency. Families must be at the table. The San

Francisco Bay Area PLAN *Transformative Family Engagement Standards* can be the start of how family involvement is evaluated (see link in the parent organizing resources section).

We also call on school districts to prioritize funding of full-time parent-family coordinators, who are of and from the communities served by the school, and who can support the connection between teachers, administrators, and students. Budgets are social contracts. When a family coordinator position is budgeted, the school benefits.

Who holds leadership accountable? The students, parents, and the larger community. In the same way that families must be a more integral part of the fabric of schooling right now, community members should take ownership of their local schools by holding the elected and appointed officials in positions of power accountable for the school they would like to see in their community.

We also need to have accountability for ourselves, particularly families who hold disproportionate privilege in our school system. We urge all parents and caregivers to consider their position to enact change in this system and lead an antiracist charge that would include the radical rebuilding of school and family partnerships. The necessary steps to changing school cultures should not fall on the backs of communities of color; rather, we must all be accountable.

Thank you to the children who shared their art with us, and their parents for supporting them to share.

(Re)Sources:

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Resources Particularly for Parents and Parent Organizers

Parent Organizing/Power of Parent Knowledge

- Global Family Research Project: Research papers and Resources on engaging with parents and families <https://globalfrp.org/>
- Lessons from Families with Power/Familias con Poder:
<https://www.tolerance.org/magazine/fall-2009/learning-to-roar>
 - A short list of lessons from teachers learning to organize with parents:
<https://www.tolerance.org/professional-development/grassroots-parent-organizing>
- “Once I’m Comfortable, No One Can Shut Me Up!”: Building Community and Agency with Family Meetings. By Melissa Adams-Corral <https://medium.com/@heinemann/once-im-comfortable-no-one-can-shut-me-up-building-community-and-agency-with-family-meetings-9c63eac6aad4>
- San Francisco Bay Area PLAN family engagement standards:
<https://www.bayareaplan.org/our-work/transformational-family-engagement-standards/>
- CASIO Education & TODOS webinar by Maria Zavala and Marta Civil. *Black, Indigenous, & Latinx Parents as Intellectual Resources: From Option to Imperative*. August 4, 2020. Recording: <https://youtu.be/yoIt-7-pQ7k>

Mathematics Resources for Parents (Varios en Español)

- Math and Parent Partners (MAPPS): Research and resources on engaging Latinx families in building mathematics agency in students and leadership among parents
<https://mappsua.wordpress.com/>
- Young Mathematicians <http://youngmathematicians.edc.org/>
- Erikson Institute - Early Math Collaborative <https://earlymath.erikson.edu/ideas/>
- Zeno Math powered <https://zenomath.org/activities-page/>
- California Department of Education has resources in Spanish and English for parents:
<https://www.cde.ca.gov/re/CC/mathinfoparents.asp>

- DREME Early Childhood Mathematics at Home, some articles applicable to early elementary (English y Español): <https://dreme.stanford.edu/news/home-early-math-learning-kit-families-ideas-supporting-young-children-s-math-skills-during>
- Blog de Linda Levi: Haciendo las Matemáticas en Casa - Promoviendo la Solución de Problemas; Sugerencias para Padres <https://www.cgimath-tlc.org/blog/2020/5/20/haciendo-matematicas-en-casa-con-tus-hijos-promoviendo-la-solucion-de-problemas>
- Linda Levi's Blog: Doing Math with Your Child - Promoting Problem Solving; Suggestions for Parents
<https://www.cgimath-tlc.org/blog/2020/3/20/doing-math-with-your-child-promoting-problem-solving-suggestions-for-parents-by-linda-levi>
- TODOS LIVE recording: Math at Home/Las Matemáticas en Casa: <https://www.todos-math.org/todos-live-#March24>

Further Reading: Research on Engaging Latinx Parents in Mathematics Education

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