Race, Equity and Mathematics Education  
August 11th at 3PM EDT

Introductions (in grey)

Jamylle C: Jamylle Carter, Professor of Mathematics, Diablo Valley College (San Francisco Bay Area)

Melissa B: Melissa Banister, Math Dept Head, Marlborough School, Los Angeles

Patti C: Patti Curtis STEM Fellow US Dept of Ed

Natalie J: Natalie Johnson, Retired Mathematics K-12; Department Chair of Mathematics at National Louis University

Nan S: Nan Soto

Cynthia C: Cindy Callard, University of Rochester

Gretchen Y: High school Math Teacher, Dean of Faculty, Portland, Maine

Erin S: Erin Schneider, Math Dept Chair, Atherton HS, JCPS, Louisville, KY

Karen G: Karen Gaines Professor emeritus from St. Louis Community College (including teaching future k12 teachers)

Chris T: Chris Tempro math teacher Building 21 HS Allentown PA

Dawn P: Dawn Wirts, Physics teacher, San Diego, CA
Mary Jo H: Hello! Mary Jo Hutchinson, K-12 Math Curriculum Supervisor and STEM Coordinator, Delran (NJ) Schools

Rebecca S: Rebecca Strom, Math instructor in Adult Basic Education, in Southern MN.

Fanny S: Fanny Sosenke, middle school math teacher, Chapin School, NYC

Josiah L: Josiah Lookingbill, Secondary Mathematics Teacher, Baltimore County Public Schools, MD

Susan K: Susan Kelly, Physics Teacher, Danbury, CT

Kelly I: Kelly Ivy, PhD. Candidate in Math Ed at UMD :)

Scott G: Hi everyone! Scott from Cherry Hill NJ!

Monica S: Monica-5th grade DL self-contained Title I school -Austin, TX.

Jessica H: Jessica Haskins, Math Dept Chair, high school math teacher, St. Louis, MO
Al R: Al Reiff, Math Dept Head, Taft School, CT

Elizabeth M: Elizabeth Silva Mendez, middle school math teacher, Salem, OR

Robert B: Robert Berkman, Pre-K to 8th grade math coordinator, The Manhattan Country School, NYC

Paul G: Hi. Paul Goldenberg, former teacher, all levels, current mathematics curriculum developer.

Amy G: Amy Getz, Charles A. Dana Center, University of TX-Austin

Pamela M: Pam Meaader, Portland, Maine adult education

Deb K: Deb Kimminau, secondary mathematics teacher, Aurora, IL

Brianna J: Bree Juarez, 4th Grade Math and Science, Austin TX

Mark E: Hi! Mark Ellis, math teacher educator from CSU Fullerton in southern CA.

Patrick B: Patrick Balcer 7/8 math. Pennsury SD. Bucks Co PA

Karen J: Hi, Karen Jeter, High School Math Teacher, Dade City, Florida
Stephen G : Stephen - MA Dept of Ed, Center for Instructional Support, Math Specialist

Dymphnia San N: Dymphnia San Nicolas-Diaz, 9-12 Math Teacher, Department Chairperson, Tiyan High School, Guam


Mariah M : Mariah Morris, Innovation and Special Project Coordinator in Moore County Schools, NC!

Pamela J : Pamela Jull, Applied Sociologist and STEM Teacher Training program evaluation researcher, Bellingham, WA

Michelle C : Michelle Cincotti, Special Education Case Manager/Co-Teacher, 8th Grade Algebra and Science, UMASD, King of Prussia, PA


Kelly S : Kindergarten Teacher

Katey S : Katey Shirey, eduKatey STEAM consultant, Washington, DC

David P: David Powers, math faculty, Las Positas College, Livermore, CA (Northern Ca)

Alexis A : Alexis Achiah, 5/6 Math Team Lead, Chicago Public Schools

Christopher G : Chris Guthrie, (Portland, OR), background is actually in Social Science/History, but I support teachers in multiple disciplines in developing curriculum and felt this was a very important topic.

Blake T: Blake Turner, doctoral student in Minority & Urban Edu, Univ. of Maryland

Kristin L : Kristin Lesseig, Washington State University Vancouver

Brittany L : Hi! Brittany López-District Instructional Coach Portland, Oregon

Mariko K : Mari Kamiya, 7/8 math teacher, Meredith School in Philly

Carlos M : Hi everyone. Carlos Monteiro, UFPE - Brazil.

Kathy C : Kathy Chen, STEM Education Center at Worcester Polytechnic Institute

Hee-Joon K : Hee-Joon Kim from Richmond, CA. Math ed researcher
Nicole M: Nicole Martin, researcher and STEM education evaluator, University of Texas at Austin, Texas Advanced Computing Center

Sohnia M: Sohnia Malik, Math Consultant at Wayne RESA from Michigan

Robin A: Robin Anderson, assistant prof math ed, NC State

Jennifer K (she, her): Jennifer Knudsen, senior math educator, TERC. I am in Austin TX

Lindsay G: Lindsay from Portland, Oregon

Cathryn A: Cathryn from Philadelphia, Math network leader

Emily H: Emily Handy, K-12 Math Teacher Leader in Bloomfield Hills, MI.

Crystal M: Crystal Morton from Indianapolis, IN

Irene H: Irene Hsiung, Math Teacher, Marlborough School, LA

Teresa L: Teresa - from TERC - sr math ed designer

Vaughn S: Vaughn Samuel - 7/8 Math - Washington, DC

Carol F: Carol Fletcher from UT Austin’s WeTeach_CS project

Jonathan S: Jonathan Shiller 5th Grade math Chapin School NYC

Steve W: Steve Weimar, formerly director of the Math Forum, currently working on online programs addressing equity in math ed

Shannon S: Shannon Shurko Earth Sci-STEM (NC)

Heidi S: Heidi Schuler-Jones, adult education math curriculum and PD developer with TERC

Jessica R: Jessica, associate prof at UW College of Ed in Seattle

Kathleen G: Katie Grimes, Algebra 1 Teacher, NYC

Mary Elizabeth L: Mary Elizabeth LaCrosse, 3rd Grade Teacher, Good Shepherd Catholic School, San Diego

Debora S: Hello, Debora Southwell from Arlington, VA; U.S. Dept. of Education

Lynn B: Lynn Biehn 8th grade math
Amy V : Hi! I work in adult education at a technical college in rural northern Wisconsin.

Robert A : Bruce Arnold, ARCHES ACCESS, Orange County CA

Joyce C : Joyce Culley, CTE Director, Danville Public Schools, Danville, VA

Emily G : Emily Griffith, 4th grade general educator in and inclusive school in Providence, RI

Shiho B : Hi from Naples, ME. HS math teacher

Julie C : Julie Cantillon San Diego Catholic Schools PK-12

Betty F : Betty Fletcher, 3rd grade teacher, San Diego, CA

Cathy H : Cathy Humphreys, Mountain View, CA

Salam A : My name is Salam, I am a University Field Supervisor, and currently a PhD student in Mathematics Education

Joseph R : Joe Reaper from North Carolina Department of Public Instruction

Sarah H : Sarah E Hansen, she/her, Great River School, 7-12 Math Montessori, Saint Paul, MN

Shelby S: Shelby Schaefer from Girlstart, a non-profit based in Austin, TX dedicated to empowering girls in STEM.

Raven A : Raven Andrews, math teacher, Notre Dame Prep, Towson, MD and I'm joined by Catherine Dearborn, math teacher, Loyola Blakefield, Towson, MD

Aankit P : Aankit Patel from City University of New York, STEM Teacher Education

Bobbi H : Hello all, I am faculty member at the University of San Diego and teach STEM for Elementary preservice teachers

Jennifer S : Jenn Sauriol from MA DESE

Marcia M : Marcia Millet, Dept. Chair/Professor Nashville, TN

Joanie G : Joanie Gallagher D214 Math science division head

John K : John Kea, High School Math Teacher, Lansdowne, PA

Ashly R : Ashly Rogers from The Hope Academy
Nykema L : Hi from Atlanta, Ga. I'm an Educational Outreach Coordinator in the College of Computing at the The Georgia Tech Institute of Technology

SARA O : Sara Odioso, Grades 6-8 Math Teacher at Nativity Prep Academy

Lisa G : Lisa Garbrecht from UT Austin EPIC STEM Evaluation Services

Annie F : Annie Fetter, suburban Philly, consultant and working with the 21st Century Partnership for STEM Education near Philly.

Katherine S : Katherine Seol, middle school science teacher, grad student

Jennifer F : Hi All! Jennifer Fine from Raleigh, NC. I am the Elementary Science Senior Administrator for Wake County Public Schools.

Evelyn G : Evelyn Gordon, Senior Researcher at Horizon Research, Inc. in Chapel Hill NC

Richard T : Richard Tchen, from Philadelphia, working with Steve Weimar on online programs addressing equity in math education

Stephanie B : Hi, everyone. Stephanie Baker from UT Austin EPIC STEM Evaluation Services.

Carla D : Carla Diede, Instructional Coach at middle School level Harrisburg, SD. Previous experience as a middle school math teacher

Patty L : Patty Lofgren, Director of Professional Development, Mathematics Education Collaborative, Tigard, OR

Abi L : Abi Leaf, Escondido Union HS District, Content Specialist Math and University of San Diego, adjunct faculty, math ed.

Nicole R : Nicole Ricketts, Grade 7/8 teacher, GTA, Canada

Julie B : Julie Brown, Director of Advanced Learning at the Institute for Advanced Learning and Research in Danville, VA

Jennifer R : Jennifer Ruef, Mathematics Teacher Educator and Researcher, University of Oregon

Jessica S : Jessica Spott, STEM Center for Outreach, Research & Education at Texas Tech University

Harriette S : Harriette Stevens, mathematics educator/consultant San Francisco

Amelia S : Amelia Stone-Johnstone, Doctoral Candidate, San Diego State University
Brittany R : Brittany Rhodes, Founder and General MATHager, Black Girl MATHgic (math confidence subscription box for 3rd-8th grade)

Tiffini P : Tiffini Pruitt-Britton, College/University Lecturer, PhD Student at Southern Methodist University in Dallas, TX

Washington R : Washington Reis, I am an undergraduate student of mathematics at the Federal University of Rio de Janeiro (UFRJ / Brazil)

Shane W : Shane Woods, Director, STEM Center of Excellence, Girl Scouts of Northeast Tx

Lisa L : Lisa Lamb, San Diego State University

Jennifer W : Jen Wolfe, she/her, Mathematics Teacher Educator and Researcher UA, Tucson AZ

Eileen M : Eileen Murray, she/her, Mathematics teacher educator and researcher, NJ

Lynne G : Hello Everyone! Lynne from Massachusetts

Alexander P : Alexander Piazza, 6/7 Math Teacher@ William Meredith Elementary and Phila. School District New Teacher Hire Facilitator, Philadelphia PA

Maria S : Maria Sanchez, Middle School Math Teacher, Brooklyn Friends School, Brooklyn, NY

Noelle C : Hello! Noelle Collis Science teacher leader Bloomfield Hills Michigan

Lauren L : Lauren Lamb, 7/8 math teacher, DC

Mr. N : Caleb Nelson, Undergrad student in the STEM+ Secondary Education program at the University of Kentucky (Lexington, KY)

Elizabeth H : Liz Hicks, Kansas City, KCKCC, MCC, KCKPS Biomanufacturing Program, & K-12 Initiative (middle through college level)

Kim Descoteaux : We are muting everyone and turning off all cameras. During the breakout session, you will be able to unmute and turn your camera on

Thomas A : Dr. Thomas Aberli, Principal of Atherton High School in Louisville, Kentucky (and former math teacher)

Kari A : STEAM Specials teacher in Madison, WI

Kim Descoteaux : We are muting everyone and turning off all cameras. During the breakout session, you will be able to unmute and turn your camera on
Patricia H: Hello, I'm a STEM teacher in Massachusetts.

Pamela J: So good to hear those inspiring and resonating words today.

Robson S: Hello everyone. I'm a Mathematics student from Brazil.

Julie C: Very powerful, Tori!!

Tyeisha C: It is exhausting being the "only". I get it!

Dee C: Dee Crescitelli- Kentucky Center for Mathematics

Nan S: Great to see you Tori - you are a Queen!

Alexander P: Haha

Amelia S: Georgia transplant from New York!

Mary L: Mary Langmyer teaching math at a PBL charter school in Milwaukee WI

Galaxy S9: hello all! HS math tchr in Connecticut. happy to be here! @MonicaHousen

Alexander P: So happy to meet all of you and be here today.

Joi SPENCER: 1. Share about instructional practices that impede and those that promote African American mathematics learners.

Charlotte S: my challenge with the percent story is that not everyone has money to go out to eat and tip. I’m not sure tipping context is 100% culturally relevant. thinking of students who may be on free or reduced lunch and my old students who were refugees

Chris T: Valuing individual memorization and speed rather than collective discourse and sense-making is a huge impediment.

Maria Z: I love what Joi is saying, that it’s not the student who is different, there is something about how we’ve set up the class as teachers.

Leilah K: The expectations of them in the class with regard to knowledge and the multiple ways of being and knowing - you must have a multiplicity of ways to address students

Ryan P: !!! limited exposure to valuable mathematics

Bev D: Love that! Worksheets with problems! I dislike naked number exercises.
Lauren L: Promote - high expectations and true belief in the ability of ALL students, using mathematics as a tool to understand and change the world, finding space in the content for students to connect (for example students used rigid transformations to represent themselves)

Laura H: Communal learning supports...

Princess R: SUCH a good point. NO subject should be a series of neverending worksheets

Josiah L: "limited exposure to rich mathematics" - keeping that, thank you

Tracy F: 100% agree about the need to be curious about students thinking

Katey S: Yes! Curious as educators, and vulnerable that we’re learning too.

Laura H: Such a good point - students will not be curious, if the adult is not!

Tory L: How did you do that/think about that > why did you do that

Robert B: There should be an investigation of the racist origins of tipping, and how it promotes underground economy where people who live on tips can’t access thing like social security, unemployment and disability benefits.

Fang X: Curiosity is the best teacher.

Ryan P: versus copious exposure to /cheap mathematics

Paul G: All kids are curious. We need to tap that! Problems that are genuinely puzzles, surprises, not mere exercises.

Catherine B: Well said @ Ryan Prior

John K: "Why?" is our best question as educators

Paul G: I do them because /I/ am curious, not because you told me to do them.

Lisa L: “How did you think about that?” assumes thinking and assumes knowing. Love it!

Laura H: The tip problem was just an example.

Alexis A: so much intersectionality within a human

Ryan P: we often have different personalities when speaking different languages - and in the mathematics classroom we are teaching new language thus developing a new personality
pbalcer: Isn't identity formed through successes and failures? Helping students find success will lead to a positive math identity. Just a thought.

Ryan P: Love Dorothy White's take on this!!

Leilah K: Are we reinforcing the notion of being a doer and learner in math? SO good.

Brittany: Yes!

Jennifer K: And creators of math

Heidi W: Are successes and failures viewed differently based on race?

Sara D: @pbalcer I'd argue that failure can also promote positive identity if it is positioned as an opportunity to learn and grow.

SARA O: @pbalcer - Couldn't we reframe 'failures' as learning as opposed to failing? Then we offer more opportunities for successes.

Percy C: also there's a false definition or a false identity of what math is.

Josiah L: What Sara said^^

Missing the net but hitting the rim is a failure we can learn from.

Lauren L: Failure is important step in the process of learning. If teachers can show students their own growth from failure, it removes some of the fear of failure.

Julie B: Love the phrase "when you're in this room, you're a mathematician." Translates - scientist, biologist, writer, historian ...

SARA O: Yes! @Sara Donaldson

Heidi W: I think we need to teach students how to persevere in the face of hard challenges. This includes allowing them to fail and then teaching them how to get themselves up, dust off, and try again.

Julie C: Yes, Tori! We need to ensure ALL voices are heard.

Katey S: @Heidi, and give them challenges that are worthy of their time/challenge them and require their perseverance.

Felicia P: @pbalcer Beyond successes & failures, students' math identity is particularly formed by culture, and is impacted by how they are seen and supported (or not) by others.
Heidi W: Yes @Katey!

Alexander P: Re: some of the above responses about failure: maybe phrases such as, “I don’t understand this yet” or others that support a growth mindset removes the negative feeling of failure and instead becomes more of a productive struggle.

Sara D: @katey love "challenges worthy of their time"

Ryan P: I was waiting for this - interrogate why students don't see themselves as mathematicians, beyond just insisting that they are

Jennifer K: yes!

William O: Yes, Tichina!

Michelle M: Yes!

Mary L: assessment that respects different ways to express learning...stories, artwork, podcast, etc.

Lauren L: Sharing the TRUE origins of mathematics is so important in dismantling the ‘white male’ narrative

Katey S: Yes, Tichina! Change the narrative of marginalization and what we commonly call “scholastic”

Brittany: INTERRUPT THE NARRATIVE

Maria Z: Yes, Tichina. I don’t know how many teachers take the time to do this, interrogate those damaging narratives with their students.

Leilah K: Yessss- go backward and identify the environment - interrupt the narrative! Yes Dr. Joi

Michelle M: very true

Katey S: (And educate ourselves)

Carlos M: Very good point. It needs to introduce ethnoafricanmathematics as part of curriculum.

Josiah L: Right, how do we interrupt and provide the resources of ethnomathematics and others to build an understanding that mathematics is truly connected to them and something they can be proud to be connected to
Lauren L : @Carlos Monteiro Yes!!

Brittany : Seeing people who look like them doing fun things with math. as a career.

Sara D : Yes. Both Ts & Ss need new vision of what a successful mathematician looks like

Lauren L : So important for teachers to have that educational background

Shannon S : Boom! Still so relevant and unfortunately true.

Katey S : @Josiah, talk to teachers doing this work. Here’s a presentation from teacher Briana Clarke that is a good start.
https://docs.google.com/presentation/d/1epCKvjWZfwDW53eRsMgmK-swFOp503Vz8qzctkh94A/edit?usp=sharing

Monica S : I hear the same thing in the Hispanic community...I am not good at math.

Sara D : yes @Tachina and tracking starts with kindergarten screening

Shannon S : We need to shake up schedulers and guidance depts.

Alexander P : Yes!

Michelle M : Absolutely!

Sarah H : We are working towards detracting our 7-10 math courses with integrated curriculum and having ALL students take IB math classes in 11/12 year (regardless if they sit for the exams).

pbalcer : I was happy to find this webinar, because its more difficult to address race issues in a math classroom as opposed to a social studies or ELA classroom. So thanks for the opportunity to learn.

Christelle R : I agree, Tichina! It's difficult to convince students that we believe in them if the structures are not set up to show them that.

Paul G : @Tornette. Yes on the curiosity! Kids also like challenge. Just not meaningless drudge.

Michelle M : Yes

Chris T : A push for EXCELLENCE must define terms - Excellence in mathematics is NOT an 800 on the SAT. That's only excellence in test taking.
Melissa B: yeah. its not an equalizer when many of my most privileged students have tutoring 8 hours a week for thousands of dollars

Michelle M: I too facilitate Social Justice Mathematics with my "intervention" students. The majority of them are black and brown

Josiah L: @Katey Shirey, thank you for that. A quick skim seems to assume a little too much of Greek without a clear identification of how much was Egyptian first. It's really hard to represent all of this well, so not meaning to reject a start (which is how you characterized it).

Mark E: The elementary version of NCTM's Catalyzing Change book series powerfully calls out tools such as math screeners that label young learners as somehow deficient in math (despite the truth that every child thinks mathematically). Tracking starts very early in schools and must be disrupted.

Carol F: Research here in TX shows how opt-in policies for advanced math starting as early as Grade 5 track low-income students and students of color out of advanced math courses very early on. Changing school/district policy to opt-out (meaning every student in top 40% in Grade 5 math for example is placed on a math pathway that will lead to All 1 by Grade 8, increases diversity of students in advanced math. This ensures that it's not up to the social capital of parents to get their capable students into advanced math.

Harriette S: It's important to make mathematics relevant.

Brittany: This conversation and chat is so refreshing. Everything everyone is saying is the impetus behind why I do what I do!

Percy C: it helps to have a focus on problem working vs problem solving. one of those sends the wrong message that all problems have checkable solutions

Melissa B: yep. every time a student says "I love how theres always a clear answer in math!" I worry

Brittany: Me too @Melissa

Karen J: Perfect!

Reginald D: Yes!!!!

pbalcer: Fity three vs. fifty three. The proper language is the one that is spoken, right?

Lamont H: How we co-construct as educators is vitally important to ensuring that our students develop a healthy mathematics identity.
Alexis A: certain things don’t have to be a battle in math

Carol F: These kinds of policies appear neutral but actually have disparate impact on students of color, first generation students, and low income students who have demonstrated they are capable of advanced math but who for many reasons, don’t end up in those classes.

Michelle M: so glad you said that

Heidi W: Even among a race there are a variety of family cultures.

Monica D: Right on Dorothy! Our students are not blind to the filters through which we see them, particularly our black and brown babies. Acknowledging these filters and cleaning them daily is so necessary in order for us to remain curious and open to their individuality both culturally and academically.

Katey S: Claps, Dorothy. Yes, bring in that personal individuality, don’t other it.

Jinxia X: "Clear answer" shows the accuracy feature of math. We could celebrate that students love math because of that. However, we, as educators, have to point out that, many problems that can be solved by using math skills may not have only one answers or solutions.

Amy V: How often can we say "yes! say more!" to students?

Shannon S: Powerful!

Spencer P: I earned my masters of urban ed through a program that emphasizes “proper” language in their curriculum—that to say I am extremely happy to hear this side, I’m tired of penalizing kids for talking how they talk!

Michelle M: This hits home

Emily H: I'm thinking about my white first grader and his lisp. He is often told it is "cute" and is not often corrected. Such a double standard.

Ryan P: leave it to deficit-mindset math teachers to fail to understand fitty three = fifty three ....

Antonio S: Boa tarde

Mary Jo H: @monica - I love the image of the need to clean our filters daily

Reginald D: Proper language is subjective as we are emphasizing the importance and measure of "intelligence" of a bastardized version of the King’s English. The English certainly do not believe Americans are speaking "proper" English.
Catherine B: Tracking! huge barrier

Katey S: I think a lot of teachers are too young to know the revolutionary changes that The Writing Project used to bring in students with different language practices to learn to write

Joni Falk: Some questions that I heard. Are successes and failures viewed differently based on race?

Maria Z: what Joi said: Where are those kids? This is a system working like it is designed to work. Have to disrupt those systems while we also work on classroom-level change.

Katey S: Is there a similar thing in math?

Joni Falk: Also, what is the role of working with community members to change students identity?

Martina M: linguistic justice by April Baker-Bell

Laura H: "Change students' identity"????

Alexander P: @ TachinaYes; we need to question the test structure, not results.

Josiah L: I think my students get the message that this test tells you that most of us aren't where the county expects us to be (and the student is the only one who can do something to change that).

Bill W: very important lesson. make it where struggling students want to learn.

Carol F: Even Black and Brown students who excel on standardized tests are tracked out of advanced math

Teresa L: Yas! Pacing guides - ugh.

Robert B: I've been fighting against tracking for 35 years; it's a really hard practice to eliminate. So many different interest groups defend it and teachers not prepared to teach in diverse classrooms.

Alexander P: *Tichina, sorry*

Christelle R: Yes! How can we celebrate what students know without having to use these white-centered, standardized tests?

John K: Thanks for saying that. Standardized testing limits our time for "rich mathematics"
Chris T: We are forced to be subversive in creating an engaging community in our classrooms.

Percy C: This tracking and "teaching" lots of material also doesn't do a good job at teaching math. The only ones that are able to move forward are ones that have a particular skill and not necessarily thinking mathematically.

Katey S: @Christelle And tethering future prospects to that achievement.

Ryan P: Big agree Percy

Emily H: Yes, Percy!

Brittany: +1 Percy

Mark T: In high school equivalency we really struggle with the bias and messaging of testing. In our environment, the test is the final gate keeper (be it the GED, the TASC, or the Hi-SET). So many students attend our classes, disrupt narratives of what they can and can't do, learn to value and trust their own sense-making process in math... and then take a test that re-affirms all the messaging that was part of the toxicity that often pushed them to leave school in the first place.

Shannon S: Is there anything to the notion of time of day and Mind Brain Education- concepts like abstract concepts solidify around age 16

Katey S: Yes, Dorothy!

Josiah L: Thank you, Dorothy! We barely get time to talk to each other in an asset-focus about our kids.

Percy C: particular cross curricular meeting/planning time

Alexis A: Dorothy has been dropping gems all night!! YES!

Brittany: If you are interested in learning more about ethnomathematics, check out the work of Dr. Gloria F. Gilmer, who studied the math of hair braiding in the '80s! Astounding work.

Heidi W: Yes - I created a model that showed that with all the responsibilities teachers have within the day, they cannot complete them ALL...even if they worked 14 hour days.

Ryan P: Anybody have a Twitter list with the panelists?

Katey S: Can we talk about some of the racism around math teachers of color and the authority endowed to them? Systemic undermining of their work KNOWING that their students of color need the work that we're talking about instead of white-dominant reifying math teaching
Karen J : Both Ts and Ss need more time to work together without so much pressure on data and following the script

Brittany : @Ryan I looked a few days ago but could only find Joi’s. Her handle is @joiaspencer

Teresa L : how about the standards - who wrote them? What math does it privilege? Whose math does it highlight?

Vanson N : Very Segregated in PA

Harriette S : yes,

Ryan P : Katey thank you I know others would like to hear more about that too

Vanson N : Palo Alto that is

Percy C : yes, Katey

Faith I : How to make classes like math/computer science attractive/inviting to all students, especially from various minority groups?

Alexander P : @JoiASpencer

Washington R : “This is the oppressor's languages yet I need it to talk to you.” (Adrienne Rich). We also need to subvert mathematical language, which is supposed to be a "universal" language. But who is included in this universe and who is not?

Alexander P : @Tichina_teach

Maria Z : @Washington Santos dos Reis, Yup, math is not some universal language. It’s imbued with the legacy of colonialism and other isms.

Ryan P : Oh absolutely "can you just teach the normal way and not be a weirdo"

Sarah H : @Maria Zaval And the loss of mathematics developed in brown and black cultures through destruction (literal burning down of cultures)

Brittany : microaggressions could be a whole other panel! they're everywhere.

Katey S : Thank you for sharing, Tounette.

Lynne g : “The litmus test for the validity of this chapter is the felt experiences of African American students and communities...”
Alexis A: whewwwwwww

Martina M: yes! "don't smile till Xmas"

Katey S: Oowww. So true.

Felicia P: Speak, Tichina!

Percy C: So we don't just end up tracking students but since those of color end up mainly in lower level math classes then for some reason teachers of color can also only teach lower level classes. I think that idea of tracking affects students and teachers of color.

Monica D: this is the conversation I was waiting to hear...how important it is for black and brown students to see someone with whom they identify (at least outwardly) demonstrating excellence in academia and helping them to succeed even further beyond secondary math education...STEM needs these professionals!!!

Naomi J: Yes! Decolonizing work is for everyone.

Vanson N: Colonized mindset mistakes "good behavior" as learning

Ryan P: So many teachers are like "I'm not going to negotiate with a child" just right off the bat

Sara D: marginalized voices need to be centered which requires dominant voices to step down

Monica D: particularly in advanced math courses

John K: Yes, Percy!

Catherine B: [https://www.launchyearsreport.org/vision](https://www.launchyearsreport.org/vision)

Brian P: American schooling is steeped in White supremacy culture

Monica S: Sts also respond in different ways to different teacher races- I had a white student tell me at the beginning of a school year- that her parents were moving her out of my class because Hispanic teachers are not as smart as white teachers!

Vanson N: Compliance doesn't equal learning

Catherine B: Highly recommend the launch years report (linked in comment above) as a starting point for reimagining high school math course pathways
Katey S: Yet, doing that question in isolation (no computer) is still our only way to sort students, and that’s what we’re using to assign them a future.

Jamylle C: @Vanson - “Compliance doesn't equal learning” Whew!

Catherine B: Yes on teacher "dispositions"!

Maria Z: @Monica, damn. That’s some racist nonsense right there.

Monica D: so true

Alexander P: Yes, Dorothy! These conversations need to be had with higher-ed professionals as well.

Adrian D: How can the idea of decolonization infiltrate teacher preparation programs, where teachers are trained to endorse and reinforce White-centric practices?

Chris T: Students are always shocked when I suggest they download Photomath to see multiple approaches to solving equations. It’s like I’m not supposed to know about it. HA

Brittany: LOL they think PhotoMath is their little secret!

Katey S: @Monica, it happens with admin, teachers, parents, the whole thing. And who has the privilege to call it out—it’s white teachers. White teachers can be allies in that way, even if they are not a “higher authority”

Robson S: hahahahah OMG Yes

Lauren L: Yes, yes yes!

Dymphnia D: Students are able to use Google or Photomath to find the answer; however, as a math teacher using Standard-Based Grading, I require my students to show their work and be able to explain their answer.

Ryan P: Wolfram Alpha will show work & explanations of each step.

Percy C: I think sometimes when we talk about people's different cultures that sometimes takes a past tense sort of focus. What culture do they bring in the classroom? There needs to be a focus in our instruction on the how those cultures coming together to create a new culture help teachers in realizing that negotiating that new culture with their students is crucial to obtaining their buy in and success in the classroom

Brittany: Dang, I hate I have to leave. Tutoring time! Please check out math confidence in a box at https://www.blackgirlmathgic.com!
Ryan P: I haven't tried Photomath yet but WA has great step by step solutions to homework problems.

Brittany: [https://www.blackgirlmathgic.com](https://www.blackgirlmathgic.com) *

Heidi Williams: I think 2nd change is an interesting concept! I think this can really get in the way...

Josiah L: "Who gets a second chance...who gets to have a bad day?"

monica L: Thank you all! You have made me think deeply about Race and Equity in Mathematics. You inspire me and give me hope! Apologies that I have to leave.

Matt M: This is so great and so important. Thank you for your contributions and for making this happen.

Chris T: I don't have enough White students to compare, but I've found that when my students do well, they often claim that the assessment was easy, but when they don't do well, they internalize is and claim they are "bad at it."

Sara D: @Dorothy Yes - second chances should be universal

Jamylle C: @Chris - Whew. :( 

Paul G: Success and failure /is/ judged by expectation. If a kid who is expected to do well does poorly on the test, the teacher is surprised and assumes something “just happened.” If a child who is expected to do poorly does well on the test, the teacher assume cheating. Bad double standard.

Washington R: In Brazil, since 2003, we have laws that require the presence of Afro-Brazilian and African history and culture in the curriculum, but in mathematics education this has not yet been implemented, many of the teachers are not even aware of the existence of these laws.

John K: This speaks to a pursuit of humanity in White students vs. a tendency to demonize students of color.

Martina M: yes! insidiousness of the myth of colorblindness.

sonia black: Thank you all so much for sharing your knowledge and wisdom! So much to think about.

Naomi J: Great example.
Martina M : Dr. Eddie Furgus' work is great for admin to take on!

Katey S : Joi, yes. Intentionally seeing kids and expressing your appreciation matters and keeps them coming back and tuning in.

Paul G : @ Chris Tempro — that seems to be pretty common with all kids. I actually bother telling kids “no, it /wasn’t/ easy; you just learned how to do it!”

Kim Descoteaux : As we move into breakout rooms, we invite you to put your camera on and unmute

Monica D : @Maria Zavala, I'm confused...research shows that for significant numbers of students of color, being able to see teachers of color in any content area, particularly in STEM classes, as strong, competent models of academic success instills a confidence and hope that they too can achieve. I look forward to breakout sessions to share more, but I personally identify with this assertion and having had only one math teacher of color during my tenure as a student (from primary grades through post-secondary education) speaks to this.

Mark T : Do other folks feel like Teach Like a Champion emphasizes and perpetuates the obsession with controlling student bodies and a rigid definition of physical requirements for learning and engaging?

Katey S : Tara Brown, UMD, does amazing work on push out/drop out. Check her research out if you’re interested in this.

Naomi J : Yes. I agree with those sentiments, Mark

Kim D : As we move into breakout rooms, we invite you to put your camera on and unmute

Dee C : @Mark-- YES! It’s about control and compliance.

Maria Z : @Monica Davis, sorry I was responding to Monica Sanchez’s comment about white parents removing kids from her class because the parents said Latino teachers are not as smart.

Sara D : @mark yes - sets schools up with prison like regulations - we don't trust you to make good choices

Christopher G : I unfortunately have to run to my next session, but thank you for a wonderful session, this was really wonderful and important!

Monica D : oh good! you had me scared Maria😊

Marisa B : Yes, same - sorry about that!
Carla D: Thanks Michelle! I love the idea of the grows and glows to help kids give feedback to others.

Michelle M: Carla you are welcome!

Jamylle C: Here is a blog I wrote about the experiences of Black students in math at my community college: https://www.mathvalues.org/masterblog/lift-evry-voice-supporting-dvc-umoja-students-in-math

Monica D: There is such a need for cultural proficiency/sensitivity PD for educators...I echo all of the sentiments shared during the panel discussion regarding the importance of understanding and promoting culture within the classroom setting to empower students and invest in their success.

Jackie M: To the Zoom host, can you allow us to turn on our cameras?

Kim Descoteaux: STEMTLnet.org

Jamylle C: Hi. I wanted to share a blog I recently wrote about Black students’ experiences in their math classes at my community college: https://www.mathvalues.org/masterblog/lift-evry-voice-supporting-dvc-umoja-students-in-math

Katey S: Thank you all so much for your work and voices.

Lucine A: Thank you Annie! Always looking for more examples!

Katey S: Thank you @Jamylle! Looks rich!

pbalcer: Really great stuff here. Thank you for all of this.

Kathleen M: Here is a folder of mathematicians - not just white men! I enjoy including this in my classroom to reinforce that math is for everyone and can be done by anyone. Here is the link: https://docs.google.com/drawings/d/1FIaFAXFvQII0ehUIRX_UjIjMPVIIja1KKE8xsbGwzUYu8/edit?usp=sharing

Kathleen M: This is the correct link - my apologies

Sarah H: Thank you, Kathleen!

Melissa B: thank you Kathleen!

Rebecca I: Thank you kindly, Kathleen.
Stephanie B: This is great! Thanks, Kathleen!

Mary Jo H: Thank you for sharing the posters!!

Jamylle C: @Kathleen McGinness-Grimes - Thanks! In addition, I hope you all know about the Mathematically Gifted and Black website: https://mathematicallygiftedandblack.com/

Mary Jo H: Thank you Jamylle. I did not know that website!

Kelsey J: I also have some of women of color in the STEM field.

Kelsey Johnson: https://drive.google.com/drive/folders/1UhS8W6kyAUpBx6yiLYJivp_MT-kaUWw

Lauren L: Another great resource: http://www.math.buffalo.edu/mad/

Lauren L: Mathematicians of the African Diaspora

Sarah H: Also Latinxs and Hispanics in the Mathematical Sciences lathisms.org

Lucine Adams: @Kelsey: the folder requires access. You may need to adjust the share link access settings

Jamylle Carter: @Lauren Lamb - Yes. The MAD pages are being updated. New website coming soon!

Sylvio G: Ya'll amazing

Percy C: Also adjusting how we assess to how we teach

Kelsey J: Thanks just adjusted it

Lauren L: @Jamylle that’s awesome thanks for sharing!

Josiah L: Thank you for sharing that @Percy

Stephanie B: The AMS also has posters, but they aren’t filling orders during COVID. https://www.ams.org/posters

Katey S: Yes. Normalize the conversations that address the inequity

Jessica R: We are the They that needs to be fixed. YES.
Monica D: AMEN!

Katey S: And it

Katey S: Amen*

Karen J: Thank you for everything today; the honest conversation and the resources are greatly appreciated! As a white female teacher in the south (Florida) it is necessary to learn to reach all my students so we can all learn from one another. My school has begun to see an increase in students of color in AP and Cambridge classes and they are successful. Hallelujah!

Lauren L: Thank you!

Josiah L: This has been the best of these sort of conversations I've been to this summer. Thank you, truly.

Louise T: Thank you so much - the honesty of this conversation has been so helpful.

Lynne g: Thank you for sharing the chapter The Racialization of Mathematics Education! Permission to share broadly?

Deb K: Thank you all!

Monica D: Thank you all!

Michelle C: Thank you for this amazing presentation! Best of luck to everyone this school year!

Maria Z: Thank you, everyone! I really enjoyed listening to the panelists. Such good stuff!

SARA O: Thank you!

Ondrea J: Thank you!!

Brian L: Thank you!!!

Stephanie B: Thank you!

Sylvio G: Thank you!

Katey S: Thank you all so much!

Lucine A: Thank you!! 

Michelle M: Thank you!