

**Collective Action to Develop Awareness: Equity and Social Justice in Mathematics
Education – March 7th Webinar Chat**

Lillian Perivolaris: test

David Barnes: Hi Lillian. It works!

David Barnes: Glad you can join us!

David Barnes: We will start right at 7 PM.

David Barnes: Where is everyone from?

Heather Barton: el dorado, ar

David Barnes: Hi Heather. Welcome!

John Staley: Baltimore, MD

Heather Barton: Thank you. I really look forward to tonight's topic.

Fredric Borne-Dumont: Wallingford CT

John Staley: Welcome everyone

David Barnes: Welcome Fredric.

Julia Guggenheimer: NYC

Marissa Utterberg: Cleveland, OH

David Barnes: Welcome Julia

David Barnes: Welcome Marissa

Lillian Perivolaris: Great!

John Christiansen: New York, NY

Lillian Perivolaris: Toronto, Ontario, Canada!

David Barnes: Hi John C., Welcome

John Christiansen: Thank you.

David Barnes: Glad to have you Lillian, and welcome.

Jim Pai: Ottawa, Ontario, Canada

Jim Pai: Looking forward to this :)

Deb Bulin: Hebron, Nebraska

Jacquie Duginske: Illinois

Tamara Moyler: Chesapeake, VA

Diana Erchick: Columbus Ohio

Diane Kinch: Diane Kinch: Claremont, CA

Micaela Hays: Atlanta, GA! :D

Geillan Aly: Hartford, CT!

Micaela Hays: I'm currently an undergraduate doing some research on social justice in math education. Can't wait!!

John Staley: Micaela, sounds exciting. Which school

Micaela Hays: Kennesaw State University

Suzanne Weishaar : Hi, I am Suzanne from Burlington VT

JENNIFER APPLGATE: Herndon, VA

Halil Tasova: Athens. GA!

Amber Schreve: Milwaukee, WI!

Kimberly Rosario: San Francisco, CA

CHRISTOPHER SANDS: Toronto, Canada

Steve Weimar: Rutledge, PA

Rachel Manjarres: Rachel Manjarres: Woodridge, IL

Andrew Kelly : Hello Everyone! Hamilton, Ontario

Kyndall Brown: Los Angeles

Alexia Mintos: Hi Everyone! Norristown, PA

Nora Ramirez: Tempe AZ

Anthony Fernandes: Hey David

Angela Dezall: Angie, Alberta, Can

Lawrence Lesser: El Paso, TX

Anthony Fernandes: Am from Charlotte!

Farshid Safi: Orlando, FL

Natalie Holliman: Little Rock, AR

Amparo Moreno: hi everyone

Micaela Hays: I used to live in El Paso, too! How cool!

Paul Verschueren: Seattle, WA

Katey Arrington: Hello Everyone! This is Katey from Austin, TX

Erin Igo: hello!

Joan Commons: Joanie Commons San Diego

Jim Barta: Good evening everyone, Jim Barta

Susie Smith: hi. Susie from Austin, to

John Staley: Hi Jim

Mark Koester: Denver, CO

Dayana Covington: Hi everyone!!

John Staley: Hi Katey. Let's talk soon.

Deborah Ferreira: Toronto, Ont

Katey Arrington: Would love to, John!

Anna Thompson: hello from Minnesota

Marla Wilson: Richm0nd, VA

Jeffrey Glenn: hello from Detroit

Comfort Akwaji-Anderson: Hello Dr. John Staley

Janet Payne: California

Connie Schrock: Hello everyone.

Lew Douglas: Hello from Oakland CA

John Staley: HI Comfort

Shirlette Walton: Hello from Canada

Janet Herrelko: Janet Herrelko, Thanks for these webinars!

Lou Ann Fravel: Hello from Pittsburgh

Rosa Serratore: Rosa Serratore: CA Math Council-South, CMC-S

Kathrine Gilman: Boston, MA

Telannia Norfar: Oklahoma City

Lawrence Lesser: and NCTM has an upcoming book with social justice lessons for secondary school teachers

Christina Luthers: Christina, Baltimore MD

Carol Edwards: Hello from Chandler AZ

Jason Zimba: Hello from New York City!

Denise Spangler: Athens, GA

Vicki Vierra: Hi Rosa & Joanie and everyone else from CA Math Council!

Kim Morrow-Leong: hello from virginia m

Bob McDonald: Tempe Az

Erin Igo: Hell from Wilmington, DE

Denise Spangler: Athens, GA

Vicki Vierra: Hi Rosa & Joanie and everyone else from CA Math Council!

Kim Morrow-Leong: hello from virginia m

Bob McDonald: Tempe Az

Erin Igo: Hell from Wilmington, DE

Erzsebet Gyimes: Erzsebet Gyimes Hello from Toronto

Anthony Fernandes: Hey Bob.. how is it going

Heather Julian: Athens, GA

Amparo Moreno: jersey city nj

Bisola Neil: Hello from Wilmington, DE

Shirley Frye: Shirley Frye Hello from AZ

Laurie Speranzo: What are all of the logos?

Comfort Akwaji-Anderson: Hello Kim

Micaela Hays: About NCTM innovate, can you repeat how to find that?

Erin Igo: Hello Bisola

Cherry Dean: Hi everyone. I am from the Bahamas.

Bina Kachwalla: Bina Kachwalla: Mathematics Advisor from NZ

Bisola Neil: Hi Erin :-)

Lawrence Lesser: the logos are the organizations co-sponsoring this webinar series, Laurie

Steve Weimar: <http://www.nctm.org/innov8/>

Micaela Hays: Thanks steve!

Angela Ford: Hey Amber Milwaukee

Comfort Akwaji-Anderson: Hi Connie

Steve Weimar: you bet

Dan Meyer: Hi from Oakland, CA.

Kristin Keith: <http://www.nctm.org/Conferences-and-Professional-Development/Be-a-Speaker/>

Jim Pai: @Laurie - Details to the organizations can be found on this link
www.tinyurl.com/eqsjmath

Erin Igo: Thanks Steve for the website

Connie Schrock: Hello from Kansas Comfort

Laurie Speranzo: What is the bottom row of organizations?

Andrea Pierotti: What a great format. Thanks for making this available for us from the comfort of our own homes.

Marla Wilson: Hey Andrea!

Andrea Pierotti: Hi, Marla!

Erica Walker: Hello, everyone - having a few technical difficulties but hope to be able to present.

Paul Verschueren: should we have audio?

Paul Verschueren: ok

Micaela Hays: Paul you should hear them

Micaela Hays: check your volume settings.

Diana Ceja: Hi CMCers

Paul Verschueren: I was hearing the music at the start, then it stopped.\

Paul Verschueren: Audio all on

Abby Rosario: A.I.S Math teacher K-5

Micaela Hays: Make sure that at the top right hand corner, the speaker is green (beside the waving guy)

Haley McNamara: Hi Paul!

Micaela Hays: left hand corner***

Vicki Vierra: Hi Diana

Micaela Hays: sorry!

Amber Schreve: Hi Angela Ford & Jenny Sagrillo!

Rosa Serratore: Hi Vicki and Diana, sent text re cmc logo

Paul Verschueren: I re-logged on and can hear now! Thank you

Jeffrey Glenn: i see decemeber readings you are good.

Micaela Hays: Woo!

Lou Ann Fravel 2: I'm hearing David as an echo.

Jim Pai: yup

Cherry Dean: yes

Stephanie Velez: yes

Jeffrey Glenn: yes

Paul Verschueren: yes!

Paul Verschueren: (Hi Haley)

Dayana Covington: yes

Jaimie Scott: yes

Lou Ann Fravel 2: Erica echos too!

Nicolette Schiffmacher: i am a student from buffalo state who is going for math and I want to teach high school math

Nicolette Schiffmacher: mostly calculus

Heather Julian: Does JUME have a Twitter presence?

Steve Weimar: @UrbanMath

Heather Julian: Thanks Steve

Laurie Speranzo: So what is the difference between Social Justice Math and Culturally Relevant Pedagogy?

Micaela Hays: Same as me, Nicolette!

Orhan Kaplan: Will be Q&A session?

Kyndall Brown: Social Justice is about using mathematics to explore issues of inequity in the real world. CRP is an approach to teaching that honors the culture and language of the learner.

Vicki Vierra: Hi Kyndall! Thanks for your response.

Kyndall Brown: Hi Vicki!

Laurie Speranzo: How do we ensure equity and mathematics and still do no harm?

Lillian Perivolaris: Can we also have the slides to follow along with?

Bina Kachwalla: I guess believing that all students can learn

Theodore Howard: Yea my first meetings I did this alone

Theodore Howard: I want to be the best and will be the best

Geillan Aly: Laurie, why would you think that harm is done / what harm do you think is done if you focus on equity and mathematics?

Diane Kinch: math as gatekeeper

Laurie Speranzo: For example, using prison stats is "social justice" but what can 6th graders do about that? The only outcome of studying those is students feeling defeated.

Erica Walker: I will jump in, but there may be a slight delay to discuss Beyond Banneker and lessons learned.

Jeffrey Glenn: what was the title of that book?

Anna Thompson: each and every child can learn and understand math

Erica Walker: Beyond Banneker: Black Mathematicians and the Paths to Excellence

Geillan Aly: I see what you're saying. Realize that teaching for social justice will begin to help students rethink the assumptions in our society.

Steve Weimar: Beyond Banneker: Black Mathematicians and the Paths to Excellence

Kyndall Brown: Laurie, in the lesson about prison stats, you can introduce students to organizations that are fighting against mass incarceration to teach them that there is something they can do.

Erica Walker: Love the Banneker logo!

Lillian Perivolaris: This sounds excellent!

Geillan Aly: It may not make a difference for them in the short term, but will begin to help students see and act against the inequities in society.

Laurie Speranzo: Kyndall, that is a heavy burden to put on middle school students.

Jeffrey Glenn: I just did a math problem created by Benjamin Banneker with my students

Michelle Williams: I'm going to purchase this book

Lawrence Lesser: this part of the webinar has particular importance given recent national statements like "HBCUs are pioneers in school choice"

Geillan Aly: It may be a heavy burden, but students are always eager to get involved in something they are passionate about. There are many examples of students who can get their representative to listen to them and change their minds about legislation.

Kyndall Brown: Do you think students of color are not dealing with heavy issues? They are dealing with police brutality and mass incarceration in their real lives. Why not give them tools to help themselves?

Natalie Holliman 2: Great Book! Very EYE Opening and Informative

Angela Ford: Understanding the history is important I am excited to begin the journey of making new history

Jim Pai: I agree with Geillan and Kyndall. However, I am interested in Laurie's take on what can be done (instead?) while considering potential burden and sense of helplessness. What might you do, Laurie?

Julie McNamara: Laurie - I agree with Kyndall. Many Middle School kids are desperate to see that there are avenues for making change and that they can be involved.

Laurie Speranzo: They are dealing with heavy topics, but school should be a safe haven, and imposing prison stats on them seems too much for a 12-year-old.

Michelle Williams: Laurie Speranzo I don

Laurie Speranzo: Where is there agency? What can they DO?

Michelle Williams: think it's too much because it's their reality

Diane Kinch: Why does the topic have to be prison?

Lou Ann Fravel: Having taught middle school for 14 years, I can tell you that this is when you see their passion in causes

Kyndall Brown: What if that 12 year old has a family member that is incarcerated? They are dealing with these issues anyway.

Jim Pai: I think "too much" is a descriptor that depends on contexts that we are unable to assume

Lou Ann Fravel: start to blossom

Laurie Speranzo: If we want students to own the math, it should be something for which they have voice and agency. What can a middle school student do [ersonally aboutprison stats?

Laurie Speranzo: I want to focus on something they can change1

Laurie Speranzo: !

Jim Pai: How might you focus on the something, and what is the something?

Stephanie Velez: I think by exposing them to math in social justice is the first step to doing something.

Jim Pai: local issues, classroom issues?

Lillian Perivolaris: But it also has to be something natural...like reading a story at night. A "rich mathematical space" creates an invitation to engage in mathematics

Jeffrey Glenn: I have to go. Will a link for the recording of this webinar be sent to people who signed up?

Kyndall Brown: The only way you change something is to educate yourself about the topic and organize to change it. You underestimate the agency young peopel have.

Jim Pai: @Jeffrey, I believe this is recorded

Lawrence Lesser: Turner, E. E., & Font Strawhun, B. T. (2007). Posing Problems That Matter: Investigating School Overcrowding. Teaching Children Mathematics.

Geillan Aly: I think that saying too much projects onto the students too much. You'd be surprised that how much (even) knowledge is empowering. And for action, they can begin to make change through all sorts of ways once they see that they want to make a difference, they will have their own ideas.

David Stinson: The NCTM book Teaching Mathematics for Social Justice: Conversations with Educators address many of these questions that are being asked in the Chat (I'm one of the co-editors fo the book). I will presenting the book at the Innov8 Conference in Las Vegas that Dave spoke about at the beginning of the webinar

Trisha Meerman: I would argue that knowing the world empowers children to have a voice. The job of school is a safe haven for students to learn the realities of the world that exists so that it doesn't have to persist.

John Staley: link will be posted

Geillan Aly: David, is the book out already? I've been looking for it all year!

Jim Pai: @Trisha +1

Michelle Williams: David Stinson I will be at conference I would like hear more about your book

Stephanie Velez: @Laurie, maybe consider what you would do to change those injustices and then how does that translate into the world of the students

Laurie Speranzo: There is a difference between having voice (to recognize issues) and agency (to change status quo).

Geillan Aly: David, nevermind, I have that. I thought there was a new book coming out this year. Do you have any knowledge of that?

Laurie Speranzo: It is too heavy a burden to put on MS students to change the prison stats of the US. Where else can we enter social justice in a way that students can have both voice and agency?

Natalie Holliman 2: What a great representation of history!

Stephanie Velez: @Laurie, that is your belief it is too heavy, but what if it is not?

David Stinson: Not that I know of...

Janet Herrelko: Looks like the fractal tree at the Math Museum in NY

Lillian Perivolaris: This is really excellent and so doable!

Jeffrey Glenn: what did the picture show? I couldn't read it very well

Laurie Speranzo: @ Stephanie - what influence do MS students have on prison incarceration rates?

Julie McNamara: The tree is wonderful!

Kyndall Brown: The first place to start is with the contexts of the lives of the students you teach. If you take the time to get to know your students and find out what issues they find important, you will have a wealth of topics for social justice lessons

Trisha Meerman: @Laurie, what is the purpose of education? To enable students to develop agency. Knowing connects them to the plan a conversation at their campus. Bring speakers to school. Compare discipline practices at their campus to incarceration rates, and to discuss what their school is saying about them as learners.

Andrew Kelly : To suggest we shouldn't teach within contexts unless students can directly and instantly affect change is very limiting.

Marissa Utterberg: I WANT THAT QUOTE!

Theodore Howard: what does agency means in this case??

Jim Pai: great quote

Cherry Dean: Me too

Michelle Williams: Love the quote!

Laurie Speranzo: Addressing context is different than expecting students to do something about it.

Laurie Speranzo: contexts

Telannia Norfar: Is this being recorded?

Diane Kinch: Yeah Bree

John Staley: It is being recorded

Rosa Serratore: That

Lillian Perivolaris: Erica...thank you!

Rosa Serratore: That's our Christina:)

Kyndall Brown: When I do a social justice lesson with students, part of the lesson includes what students can do to address the issue. It is not an unreasonable expectation.

Erica Walker: Thank you, Lillian!

Kimberly Rosario: I will be there this year!!!!

Telannia Norfar: I am coming for the first time as well

Michele liams: MLK Quote: <http://www.goodreads.com/quotes/42651-one-of-the-great-liabilities-of-history-is-that-all>

Lillian Perivolaris: Have just ordered your book on Amazon! You are brillan and your message speaks directly to what we need to do to support our learners.

Marissa Utterberg: Thank you, Michele!

Laurie Speranzo: So what is the difference between Social Justice Math and Culturally Relevant Pedagogy?

Diane Kinch: The definition of what mathematics is.. Reframing it as a human endeavor.

Jim Pai: I think "expectations" can only come from the individual who is empowered (perhaps by knowledge) to do something about something they are (or become) passionate about

Kimberly Rosario: mathematics is for white people.

Julia Guggenheimer: We need to make students problem solvers not memorizers

Cecilia Arias: changing ideas about who can do mathematics

Michelle Williams: @BBASouthwest is one of our Twitter handles

Kyndall Brown: Social Justice is about using mathematics to explore issues of inequity in the real world. CRP is an approach to teaching that honors the culture and language of the learner.

Trisha Meerman: Mathematics is only for men.

Andrea Pierotti: We've heard a lot about equity with regards to race. What about gender?

Marissa Utterberg: "Multiplication is for white people." Actual quote from one of my students' parents.

Natalie Holliman 2: We need to change: Some students are incapable of learning mathematics!

Shifra Adler: The value of math is in finding right answers.

Theodore Howard: to inform all students that math was put together by all. For example fractions origin of Egyptians. Our number system is from Asia

Abby Rosario: We need to change the story that poor, urban students aren't able to tackle difficult mathematics.

Tonya Bloodworth: "I'm not any good at math"

Stephanie Velez: changing the idea that mathematics is rigid

Marla Wilson: Mathematics, a Human Endeavor is the title of my favorite math book ever.

Denise Spangler: Flip the narrative from "women/minorities/underrepresented groups need mathematics" to "mathematics needs women/minorities/underrepresented groups." It's more than a language switch; it's a positional switch. It's not about "us" giving more people access to math; it's about the richness that others with diverse perspectives bring to math.

Jim Pai: @Denise +1

Theodore Howard: 0 was best used from the mayans . I lbeieve that if all know that they played a part then we can change it

Mary Mooney: The story that begins "When am I ever going to use this?"

Laurie Speranzo: @natalie - ALL students are capable of learning math!

Cherry Dean: That Mathematics is a difficult subject to master.

Nora Ramirez: That mathematics is only for a chosen few.

Andrea Pierotti: I also think about how many times I hear "I'm just not a numbers person!" from other educators at school. Not a great example. Math is for everyone!

Orhan Kaplan: Ignoring all other culture's contributions to the development of mathematics

Theodore Howard: Andrea I love that statement

Marla Wilson: Can I quote you, Denise? This would apply to many things I a wrestling with at the moment.

Natalie Holliman 2: We need to change: the context of mathematical questions and how they are presented----to reach and connect with all students

Comfort Akwaji-Anderson: We need to change the deficit thinking about who can or cannot learn mathematics

Theodore Howard: NTalliw HollimN 2 THIS IS SO TRUE

Lillian Perivolaris: @Cherry Dean - I don't think it's so much about mastery, as it is about accessibility. Everyone can do math, but we have to creat a culture to explore and experiment while learning mathmatics.

Shirlette Walton: we need to change the notion about this fear of Mathematics that math is "difficul" and only for "smart people"

Theodore Howard: I think it starts with enthnomath first

Denise Spangler: @Marla: Sure...but it's not my idea. I don't have a citation for it, but my thinking was inspired by a t-shirt at the world congress on women many years ago that said "Women Need Math; Math Needs Women."

Mary Mooney: YES! @Comfort!

Shirlette Walton: *difficult"

Natalie Holliman 2: We need to change: Mathematical success is Genetic

Suzanne Weishaar : Julia - Ss are problems solvers - we make them memorizers...

Theodore Howard: math use around the local culture. We dont teach culture well enough let alone math correctly

Laurie Speranzo: So what is the difference between Social Justice Math and Culturally Relevant Pedagogy?

Kyndall Brown: Laurie, I have answered your question 2 times.

Andrew Kelly : +natalie holliman 2 - I have a site called Critical Math which hosts 100s of articles with diverse and relevant math contexts

Trisha Meerman: I think we need to have a real conversation that "smart" is grown and everyone can grow, I think math is the epitome of the power of "yet"

Cherry Dean: Lillian Perivolaris- you are right but many of our students do not know that.

Orhan Kaplan: Raising mathematics teachers' expectation of students and making them feel it

Julia Guggenheimer: Suzanne- that is exactly my point

Lillian Perivolaris: @cherry...then we have to create that culture in our class.

Diane Kinch: Too many view students and math from a deficit viewpoint. Our students can do anything and we should help them.

Julie McNamara: Sadly, many teachers don't believe that all kids are mathematical thinkers.

Cherry Dean: Yes, I agree.

Janet Herrelko: Watch Babies make sense of their world using order, patterns, spatial sense. It is part of their genetics for all children. We need to build off those talents.

Laurie Speranzo: @Kyndall I agree with you! Wonerig what the presenters fell is the difference.

Laurie Speranzo: feel

Lillian Perivolaris: @Janet Herrelko - I agree 100% and we have to build those talents and make it as natural as reading.

Julia Guggenheimer: Our curriculum needs to be rethought. We need to create curriculum that enables students to own their own learning.

Julie McNamara: Math is more natural than reading!

Orhan Kaplan: Yes! Prior & basic mathematical knowledge is the key toward students' ability and confidence in doing and learning math; everyone can learn

Kyndall Brown: The neocortex of the brain is hard wired to recognize patterns

Lillian Perivolaris: @Julie McNamara...thank you for saying that!

Jim Pai: @Julie I am unsure if competition between the two characterise the relationship between the two

Cherry Dean: @Janet- I agree. If we could really built on that their experiences with mathematics would be great,

Julia Guggenheimer: When we create curriculum that is problem based, they build the blocks that are a part of being independent thinkers.

Tonya Bloodworth: @Kyndall - that was funny!

Michelle Williams: Elementary teachers need more content training.

Kyndall Brown: How so Tonya?

Andrea Pierotti: Marla, do you own Mathematics: human endeavor?

Jim Pai: @Laurie I am still curious about your stance on what teachers can facilitate in the classroom. Can you say more about your concern about its impact on ownership of mathematics?

David Stinson: There are book reviews of two the speakers tonight in JUME: Erica Walker's book on learning communities and mathematics teaching and learning: see <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/299/194>; in Jim Barta's co-authored book on mathematics and culture: see <http://ed-osprey.gsu.edu/ojs/index.php/JUME/article/view/268/183> (Erica's book is published by Teachers College Press, Jim's book is published by NCTM).

Ann Wallace: @Michelle and content confidence.

Diane Kinch: Content without culturally relevant pedagogy is content not learned, all too often.

Tonya Bloodworth: I assumed the switching of a couple of the letters in your statement was intentional. My brain automatically read it correctly, though.

Julie McNamara: Our brains are wired for math and language but not necessarily for reading.

Cherry Dean: @Michelle Williams - that is needed greatly. How could this become a reality.

Kyndall Brown: It was accidental. I am a horrible typist.

David Stinson: Please forgive my typos, not much space to type...

Marla Wilson: It's either at my house or my dad's- I can lay hands on it.

Julia Guggenheimer: Diane-I agree. The problems created should be relevant to the students who are engaging in the learning.

Jim Pai: @Julie gotcha - I think I misunderstood what you meant by reading. simple a difference in definition there

Tonya Bloodworth: Hence the "hardwired" part of our brain! It was a "happy accident" that I read too much into.

Lawrence Lesser: one example from my 2007 that gets a stronger social justice component in an upcoming book chapter: Lesser, L., & Marsan, L. (in press). Class size matters: Lessons learned from average class size. In Linda Fulmore & Anita Bright (Eds.), Answering the call: Social justice in the secondary mathematics classroom (pp. _____). Reston, VA: NCTM.

Andrea Pierotti: I'd love to read it!

Diane Kinch: Culturally relevant context leads to motivation more often than not.

Renee Fisher: I want to be involved in Teachers-2-Teachers Global

Marla Wilson: I'll get it for you- it's an actual upper elementary math book.

Lawrence Lesser: also, my paper has 2 related archived webinars:
<http://www.causeweb.org/webinar/teaching/2007-07/> and
http://magazine.amstat.org/videos/education_webinars/UsingSocialJusticeExamples.wmv

Orhan Kaplan: I guess the term 'gifted' is another problem that discourage low-achieving students from attempting to learning math.

Andrea Pierotti: Meaning a curriculum?

Laurie Speranzo: @Jim Pai - I worry about studying things about which the students can do nothing! Kids cannot change prison stats. They can advocate for things like (like) more green spaces (gardens). Why not focus on things students can change rather than things beyond their control?

Julia Guggenheimer: This involves faculty working to use textbooks as resources but create problem sets that build a body of knowledge using situations that are relevant to the students.

Nadiyah Al-Gasem: Similar to project based learning

Lillian Perivolaris: I don't understand the discussion on prison stats? I'm sorry, I think I've missed something. Could someone quickly summarize for me?

Renee Fisher: I agree @Julia

Jim Pai: @Laurie so your worries are for systemic issues that may not be changed by those in the system? To what degree can one "do" something about something systemic?

Julia Guggenheimer: @LaurieSperanzo I think that a study of external causes is empowering and the students are thereby equipped to go out with data to advocate for change. It is the empowerment piece that is the greatest motivator.

Jim Pai: @Laurie (p.s. I am also at loss for where the prison stat example came from)

Laurie Speranzo: @ jim - yes! I want student agency and voice!

Lawrence Lesser: <http://www.radicalmath.org/socialjustice.php>

Janet Herrelko: Julia - HOORAY. The issue teachers face in our state is the high stakes testing content that must be covered within x amount of months. They are evaluated on their students' success. Give them time to write the culturally relevant problems.

Jim Pai: @Laurie I concur with those that said something about empowerment through knowledge. I think voice, agency come through that as a foundation

Julia Guggenheimer: @Janet I am so sorry about the test driven curriculum. It is NOT a good way to motivate learning.

Lillian Perivolaris: @Julia...I agree

Laurie Speranzo: @jim - but if kids are 12 years old, we want to put on them not the burden of the world but rather a problem they can solve.

Julia Guggenheimer: All students need a solid foundation in algebra just as writers must understand how to construct sentences. This however is not doing math. Sadly it too often becomes the entire focus of our curriculum.

Jim Pai: @Laurie Certainly that is ultimately your judgement call - But I think building a culture where discussions about "burdens" is an important aspect of my classroom

Tonya Bloodworth: @Laurie - I agree.

Julia Guggenheimer: @LaurieSperanzo Of course you should pick age appropriate statistics

Jim Pai: @Laurie I would say - perhaps begin with those that they can affect - and thus feel empowered

Lillian Perivolaris: I am not an elementary educator...but is there not room to build in ethnomathematics to the math program. In my opinion, it would do so much to create engagement. Much like Erica Walker was talking about.

Jim Pai: @Laurie I am still a bit lost about where the prison stats example came from, but I think whether one can "do something about it" is dependent on the individual who makes the decision to "do"

Laurie Speranzo: So where is the social justice context that is acceptable for students that allows for voice and agency?

Jim Pai: @Laurie I also don't see it as imposing an expectation - as "expectations" can only realistically be set by the person who moves toward it

Laurie Speranzo: It is not ok to place on a MS student the burden of changing prison stats.

Julia Guggenheimer: @LaurieSperanzo In the end the goal is to give students tools to help them feel empowered and to motivate further learning. You can build in age appropriate projects that are meaningful to the students. It need not be about prisons but it can be if that is important to those students. The key is to know your students and what is important to them.

Lillian Perivolaris: @Jim Pai...there are questions at the site shared about.
http://www.radicalmath.org/browse_socialjustice.php?t=prisons

Kyndall Brown: Sounds like it was a straw man argument. However, given the fact that there are over 2 million people incarcerated in US prisons, it is highly likely that someone in your classes knows someone who is incarcerated.

Diane Kinch: What their experiences are.

Diane Kinch: Teach us how to advocate.

Lillian Perivolaris: Will the names be posted somewhere?

Tonya Bloodworth: Obviously, the social and culture issues are going to be different based on the grade and age we are teaching and the demographic area we are in

Amparo Moreno: hi, how wonderful that you can make a difference. I would love to do what you do!

Stephanie Velez: @lillian thanks for that link!

Andrea Pierotti: Seeing math as logical, something they can reason through and solve problems with rather than steps to follow because they are "supposed to"

Marla Wilson: Making sure that Math is understood as a language suited to expressing individual ideas, not a "subject"

Yong Yoon: what's the link again?

Dan Ray: <https://drive.google.com/file/d/0B2DzSqr8u5GeYIUtdnpvZHNZXzA/view>

Lillian Perivolaris: You're welcome @Stephanie!

Kristin Keith: <http://www.nctm.org/Conferences-and-Professional-Development/Be-a-Speaker/>

Orhan Kaplan: Teachers' implicit and explicit bias and their professional development for teaching just

Brea Ratliff: @Orhan Yes

Carol Edwards: Thank you!

Laurie Speranzo: There is a difference between CR education and social justice. Have you defined that?

Julie McNamara: Thank you!

Erica Walker: Thanks, all - and thanks to the hosts for organizing this!

Diane Kinch: Thank you John et al.

Denise Spangler: <http://www.nctm.org/webinars/equitysocialjustice/>

Farshid Safi: Thank you all!

Lillian Perivolaris: Thank you!

Kyndall Brown: Thanks

Shirlette Walton: Thank you for all the good information...have a great evening.

Orhan Kaplan: Thanks!

Lawrence Lesser: thanks to all!

Melissa Hedges: Thank you!

Brea Ratliff: Thanks!

Cecilia Arias: THANK YOU!

Connie Schrock: Thank you.

Ann Wallace: Thank you!

Tonya Bloodworth: Ensuring that our students see Math as learnable and useful and beyond their grasp

Rosa Serratore: thank you!

Stephanie Velez: thank you!

Tonya Bloodworth: Thank you!

Bob McDonald: Thanks to ALL

Geillan Aly: Thank you!

Amber Schreve: Thank you!

Renee Fisher: Thank you!