Kristin Keith: Where is everyone from?

Jenna Weinstein: Chicago

Susan Seeley 2: Susan Seeley: Mt. Diablo Unified - Concord, CA

Stacie Kyhn: Apache Junction, AZ

Carmen Olmo: Hi. I am from Puerto Rico

Connie CLARK: Walker, MN

Hannah Yeats: New York, NY

DeAnn Huinker: Milwaukee

Rob Matyska: Bloomington, IN

Sara Beck: Hillsboro, OR

Rachel Pomeroy: Marquette, MI

terry hickey: terry hickey

Dr. Rebekah Lane: Tallahassee, FL

Julie McNamara: Julie McNamara and 21 preservice teachers from Hayward, CA

Marty Beck: Bettendorf, Iowa

Susan Jaggers: Riverside, CA

Jason To: Toronto, Ontario

Tara Jaeger: Rosendale, WI

Robin Schwartz: NYC

Kate Okrongo: Phoenix, AZ

Mary Violette: Maine

Janet Herrelko: Janet Herrelko, Dayton, OH

Kristopher Childs: Orlando, FL

Jacob Martens: Vancouver BC

Lisa Mellecker: Iowa City, Iowa

Carolyn Gray: San Francisco, CA

Jen Hooper: Orem, Utah

Julie Wright: Portland, OR

Kathleen Jalalpour: Kathleen Jalalpour SF Calif

Julie Wright: Julie McNamara, way to go having preservice teachers take part in this!

Kristin Keith: Julia, that's awesome!! Welcome all :)

Kristin Keith: sorry, Julie

Julie McNamara 2: No worries, Kristin!
Robin Schwartz: what is the Twitter hashtag?
Kristin Keith: #NCTMlive
Robin Schwartz: thankyou :)

Julie McNamara 2: Thanks, Julie Wright!
Julie Wright: I'm still confused about whether "compacting" more content into a shorter time (my district does 7th-9th in 7th & 8th grades for ~20%, who are disproportionately white & Asian-American) is tracking

Jason To: What's also critically important is that these marginalized students are disproportionately from racialized backgrounds, from lower socioeconomic backgrounds, and students with special needs

Robin Schwartz: does that put s’s into Geo in 10th or 9th?
Julie Wright: The compacted course includes 9th grade Algebra, so they go into Geom in 9th.

Jason To: Absolutely! Tracking is definitely segregation and needs to be called out as such.

Kathleen Jalalpour: @Julie, could it be that the tracking that exists there separates students by how FAST they learn?
Robin Schwartz: Julie Wright what state?
Julie Wright: This is in Portland, Oregon. I think this course compacting was recommended as an option by NCTM.
Julie Wright: Same content, but faster with less background review

Jason To: @Julie If students receive different curricula and where one group is privileged over another, then I would argue that is tracking

Robin Schwartz: in NY accel s’s often take Alg I Regentss in 8th grade which means they do not learn 8th grade Math content

Robin Schwartz: but also in NY it is easier to pass the HS assessment than the 8th grade exam

Rachel Pomeroy: Julie Wright, are teachers tracked with this compacting format? In my district, they are.

Janet Herrelko: All students bring strengths to the math classroom. Teachers need to identify and nurture those strengths. through collaborative work that helps all students to appreciate what is brought into class through culture, ethnicity, religion.

Kate Okrongly: I teach at 2 schools of higher education: a technical school and a community college. This practice has caused so many of my students to tell me they never had exposure to some of the concepts in beginning algebra because they were given life skills math when they struggled with algebra. Instead of helping them learn, they were tracked into a “dumbed down” course. As adults they realize how much that has hurt them.

Robin Schwartz: Rachel, effectively they are, because senior teachers at most schools get more choice in which classes they teach, but then again, sometimes those are not the best teachers.
Rachel Pomeroy: Kate Okrongly, what a profound perspective.

Kristin Keith: That with be Robert's September webinar!

Jacob Martens: "...feel safe and supported..." Yes!
Kate Okrongly: Thank you Rachel Pomeroy

Robin Schwartz: thank you Kate for sharing the lack of content exposure of your s's

Julie Wright: Kate, at least with you they are at a point where they see they were hurt, not inherently defective, as mathematicians. Hopefully some healing can happen.

Robin Schwartz: grade appropriate -- now w CCSS this is clear -- sometimes visiting classrooms or looking at student work, s's are not learning grade level Math

Jacob Martens: Thank you Kate.

Janet Herrelko: To feel safe and supported students need to be known by the teacher beyond just academic ability. Home life, skills, and how they can be successful contributes to these.

Julie Wright: "additional targeted instructional time and other instructional supports" Hallelujah, but expensive

Kate Okrongly: I have had people in their 30s become amazed that they finally learned how to work with FRACTIONS, not even Algebra at that point

Jacob Martens: I've had that happen with the teachers I work with (as a math coach).

Julie Wright: So much here... will we be able to look at the slides later without going through the whole video? (sorry if I missed this at beginning)

Robin Schwartz: a local parochial HS has at least 4 Math tracks not including accelerating up a grade level

Teneisha Myers-Ferguson: hi

Julie Wright: I think we also need to look at how placement affects students' math identity - many in lower track form negative opinions about themselves & partly or totally give up on math.

Kristin Keith: Unfortunately we do not post the ppt. You are able to skip through the recording, pause, etc

Carolyn Gray: @Julie - I agree with S identities

Teneisha Myers-Ferguson: joining from Jamaica

Jacob Martens: FYI: the transcript of this chat will also be posted

Robin Schwartz: is the instructional time computer time ala Khan A?

Jason To: This additional time should be done within the regular classroom and not segregated to a resource room

Kristin Keith: yes, thank you Jacob!

Kate Okrongly: Julie Wright that is exactly what happens. I have so many adults tell me they are not capable of math because a teacher told them or their parents told them they don't have a "math gene".

Comfort Akwaji-Anderson: Comfort Akwaji-Anderson - yes, formative assessment is key to effectively planning instruction that meets the needs of students

Robin Schwartz: double period if s's are klearning for the whole 80 90 100 mins

Julie Wright: I just can't imagine where the funding for double periods would come from in Oregon, for most schools. We already have huge class sizes.
Janet Herrelko: I told my students in the 90s that the Human Genome project was not able to find a Math Gene.

Julie Wright: Janet, that's great!

Robin Schwartz: yay to grade level :)

Jason To: Hmm... I kinda disagree that double-periods do not constitute tracking. In practice, would these double-periods be populated disproportionately by those with special education needs?

Kate Okrongly: Janet Herrelko I love that!

Sara Beck: Under this model, what happens for students who do not pass the course, even with additional supports and double-period instruction? Do they continue on to "grade level" mathematics the following year?

Jacob Martens: We have one school in my district that is semested -- students needed additional support have a second math block built into their timetable -- they drop one of their other courses. Cannot recall what they drop. French?

Julie Wright: Jason, I am wondering about that too. What message does it send to a kid that they need 2 periods of math and another gets to take a fun elective?

Robin Schwartz: unless Math is fun :)

Kim Ward: Kim Ward Dublin, Georgia

Jason To: @Julie Exactly - there should be other ways to provide additional time for students to process their learning.

Robin Schwartz: some NYC middle schools have double periods of Math for all.

Jacob Martens: Good question Julie. One I've had also. Hmm...

Kate Okrongly: I do like the idea of teachers having courses at all levels. It really helps to know what was part of an earlier course and what is really needed in the following courses.

Jacob Martens: Kate -- totally agree.

Jason To: In many schools in Toronto, we make sure our teachers teach classes from grades 9-12 and also classes in different tracks.

Julie Wright: I hope these messages are getting through to administrators... many changes here are above my pay grade.

Jacob Martens: One of the problems with secondary in my context is senior teachers cherry-picking courses and leaving junior/less experienced colleagues to teach a tougher collection of courses.

Tara Jaeger: We have a double period course but only of up to 45 stud. (15/class). The ideas are in line with what is being talked about in terms of content. The part that I believe is unfortunately in line with tracking is that teachers assign the students. Students don't get to choose the course. The course often has a high percentage of students with IEPs or students of color:(

Kate Okrongly: Just a thought... has anyone looked at how content heavy most our math classes are and if fewer concepts more in depth might help teachers help all levels of students more effectively? Of course, this would have to start in elementary school. I feel I teach the same concepts over and over no matter what the course is because the students have gaps in the basics.
Jennifer Wilcox: If a student does not have a solid base of concepts from K-5, can you review those concepts during the double period sessions for students in MS?

Jacob Martens: Kate: that is something we are attempting to do with our revised learning standards in BC

Robin Schwartz: Tara, are parents/families part of that conversation?

Julie Wright: For "express a higher degree of interest," in my middle school this would be students whose parents tend to be white upper-middle-class professionals who push them this way :(

Jacob Martens: https://curriculum.gov.bc.ca/curriculum/mathematics

Carmen Olmo: Where do you draw the line between those students who express a high interest in mathematics and those whose parents are the ones asking or demanding the acceleration?

Jacob Martens: A work in progress....

Julie Wright: Carmen, YES.

Kate Okrongly: Jacob - I would be very interested in how that goes. I

Julie Wright: Anyone else's sound going out?

Jacob Martens: Our schools are K-7 and 8-12. Our learning standards (we unfortunately call them our curriculum) are shifting the emphasis to curricular competencies.

Tara Jaeger: @Robin Yes. The 8th grade math teacher talks with each student and parent(s) to talk about the recommendation for their second period of Algebra concepts.

Jacob Martens: The dog has something to say -- is it agreeing or disagreeing?

Kristin Keith: No, sound is good.

Connie CLARK: You're a dog guy! I love it!

Kate Okrongly: No dog is saying why do humans struggle so much with math

Robin Schwartz: Thanks Tara

Kate Okrongly: I meant the dog

Jacob Martens:)

Jacob Martens: https://www.youtube.com/watch?v=PisZ8Hxr97s

Jacob Martens: Love it. Your dog showing up has reminded me about the world as we find it and the visions we have for what it could be -- totally relevant to this conversation about de-tracking.

Stacie Kyhn: Just watch the video Jacod. Way too funny!

Kristin Keith: Any questions? Type them here :)

Comfort Akwaji-Anderson: How does one begin the tracking conversation in a district where taking advanced courses equate status?

Jason To: In some schools in Toronto that are considering detracking in high school, a catch-up course in first semester seems like the most popular idea. That's still tracking to an extent, but the hope is that those students can then fully reintegrate into the regular program in second semester
Tara Jaeger: Right now we make a lot of decisions behind closed doors with teachers and admin and have forgotten to talk with and ask students and parents. We are hoping to open this conversation more in the future.

Stacie Kyhn: Am I correct in saying that PreAP or Honors classes would be considered tracking? If so, how do you move away from these weighted courses?

Carolyn Gray: How does this message about detracking change for gifted students? Especially those who are tracked at a very young age? Is there good research on the impacts of those decisions on the student's academic and psychological future?

Jacob Martens: Math "success" unfortunately is often used as a metric for intelligence and future success. How do we respond to educators who say "its not fair to hold back the 'smart' kids?" (belief that fast = smart, especially with algorithms)

Jason To: In Carol Burris' school district, detracking meant that all students did the highest and most prestigious program, which was IB for them.

Kate Okrongly: I have had a student as young as 12 years old in my community college class when her parents felt she needed more challenge.

Jennifer Wilcox: Wouldn't quality tasks with low floor and high ceilings take away the need for acceleration?

Kristin Keith: I can add the link with the recording

Jacob Martens: Jennifer -- agree.

Jason To: Taking away prestigious programming will only cause privileged families to rise up and challenge detracking, which is definitely not what anyone wants!

Tara Jaeger: @Jennifer -- I agree

Michelle Fuqua: Jennifer - I agree

Jacob Martens: Jason - agree

Rachel Pomeroy: We have a school-of-choice law in Michigan. Our district will face real consequences as students transfer to other districts when parents are angry about their "high-achieving" students no longer tracked above the general population. What is the best way to garner support from the families who will feel that their students are being deprived by a detracking policy? Maybe input from professors about the college performance of tracked high schoolers?

Carolyn Gray: Agreed that we need to distinguish between promise and ability, and I think these are some of the most challenging conversations with students and parents

Carmen Olmo: I agree, jason

Flora Quevedo: Our advanced students are the only students that have access to Calculus because the prerequisites are only offered officially at an advanced level. Core/General students are not able to get into these classes unless an exception is made. What first step would you recommend to address this?

Julie Wright: Flora, same in our district. Regular Common Core track has them at Alg/Geom/Alg in 9th-11th and then they don't get to Calculus.

Flora Quevedo: exactly
Jacob Martens: Thanks Carolyn -- I've taken a screenshot of your comment -- going to pin it beside my monitor for this coming school year.

Hannah Yeats: How might we continue the conversation when administration defends tracking decisions with high state assessment pass rates - especially with algebra I?

Flora Quevedo: We offer "Geometry K" and

Tara Jaeger: Detracking teachers is a challenge we face b/c certain teachers have to teach the high level courses where students receive college credit. For us it is the same four teachers out of fifteen in the department that teach the high level courses. How do we get around this?

Jacob Martens: Flora: same in BC

Julie Wright: I personally don't have a problem with that, but it makes me very worried my own kid will get shut out of STEM majors in college.

Robin Schwartz: @Hannah what state?

Carolyn Gray: @Jennifer. In theory, I agree about quality tasks, but you still run into the problem of status, where those who feel they need (and possibly really do need) greater challenge are working on the same task as peers. I teach middle school, where perception is a big barrier.

Hannah Yeats: (in my case, students are in a 1 year or 2 year algebra I course that ends in the state algebra I assessment)

Rachel Pomeroy: Thank you, Robert, for your answer.

Hannah Yeats: @Robin NY

Carolyn Gray: Thanks @Jacob. I'd love to hear if you make any headway.

Robin Schwartz: @hannah your school does 2 yrs for Alg I?

Jacob Martens: Carolyn: wish me luck:)

Robin Schwartz: @hannah also in NY

Julie Wright: Wait, the decisions that knock out Calculus are the same decisions NCTM backs - that students need Common Core grade standards!

Robin Schwartz: rather than access to Calculus some accelerated 8th graders who take Alg I only take 2 more yrs of HS Math

Robin Schwartz: @julie acceleration for Alg I in 8th in NY leaves out 8th grade CCSS

Kristin Keith: Any other questions?

Sara Beck: Is Calculus in high school a necessary goal? Not all students need Calculus for their career or life goals.

Julie Wright: Robin, ugh. So much good non-algebra math in 8th.

Julie Wright: Sara, it is if colleges say it is.

Flora Quevedo: Geometry K, Algebra 2K and Trig K which are almost entirely algebra 1 content - but I doubt anyone outside the district/department realizes the "K" means they are prep courses for an algebra 1 state test. What would you recommend to address this? Courses were created because students weren't passing state exam which is now grad requirement.
Robin Schwartz: Julie yes and then 9th graders go onto to Geometry w/o any 8th grade Math and will get to Chem in 10th without sci not

Robin Schwartz: @flora coding is where it's at a lot of schools do s's take the Alg assessment in 9th?

Jennifer Wilcox: I am getting my masters in math ed for PK-5 and we had this same discussion today.

Sara Beck: What role does student interest and focus play into this?

Robin Schwartz: how can we include elem teachers in this convo?

Julie Wright: RQB, I want to THANK YOU for encouraging this conversation. Hope it gets beyond teachers.

Jason To: How could we leverage the work that different school districts are doing in terms of detracking math? Can we organize and have some forum to share strategies and ideas?

Robin Schwartz: @flora what state?

Flora Quevedo: PA

Tara Jaeger: We have student taking Algebra in middle school, sometimes geometry also and then after their 9th or 10th grade year they are opting out of math. This prompted a much needed conversation about over accelerating in middle school.

Stacie Kyhn: I would like to see a bridge from high school to college as well.

Carolyn Gray: Yes - ability grouping leads to tracking

Robin Schwartz: yes that is my fear in NY @tara too much too soon

Robin Schwartz: but it's also a way to address low middle school scores as passing the Alg I Regents is easier than the 8th grade exam

Robin Schwartz: @flora are there copies of your state exam online? All our Regents are public info

Julie Wright: Robin, that is insanity - testing tail wagging the education dog??

Flora Quevedo: Only sample questions

Robin Schwartz: thanks @flora we are lucky in NY

Robin Schwartz: we now have about 14 CommonCore Algebra I Regents

Tara Jaeger: @Robin We started the conversations 1-2 years ago but we (a colleague of mine and I) couldn't get teachers and admin to listen. This year we collected the data and talked more with high school guidance about what they are seeing. This helped a lot b/c we put names with the conversation and they didn't like to hear how many of their students are either opting out of math or their grades are declining as they get into high level courses. It then became personal and they were willing to listen. (I am an instructional coach in our district)

Jason To: Terrific. Thanks

Robin Schwartz: http://nysedregents.org/algebraone/

Julie Wright: Do teachers in districts other than mine really get any say in what courses and tracks are offered?

Robin Schwartz: thanks @tara

Janet Herrelko: Sometimes if you are trusted by the admin
Rachel Pomeroy: Julie, not in my case. I feel like the least powerful stakeholder in this. :/
Robin Schwartz:@tara do you think grades are declining b/c it is too hard? Or is the bar just higher? I come from an engineering school mindset where a C is the average even if the avg score is 18
Carolyn Gray:@Robin - I think it’s critical to partner with elem teachers - especially to keep an eye on kids over time.
Julie Wright: My administrators in our building don't get any say either. It's all top-down.
Robin Schwartz:yess @carolyn and also to help elem t's feel comfortable with content and parents too
Carolyn Gray: Schools need to provide time and space for these conversations
Julie Wright:(and we don't have access to coaches or math specialists)
Janet Herrelko: When schools are changing textbooks is a good time to jump in with recommendations for changing curriculum offerings
Tara Jaeger:@Robin -- thanks for sharing
Kate Okrongly: Maybe schools should invite input from college professors. I know many, including myself, who would be glad to participate.
Kristin Keith: Sorry! I’m having audio issues
Julie Wright: Really glad to hear about engagement with administrators and counselors on this.
Jennifer Wilcox: Thank you!
Dr. Rebekah Lane: I agree with Kate. I teach at a community college.
Sara Beck: Thank you
Comfort Akwaji-Anderson: Thank you Dr. Berry :)
Janet Herrelko: As a teacher and college professor I have been involved with several curriculum changes due to textbook changes
Carmen Olmo: Thank you for you sharing your expertise and motivating us to start the much needed conversation.
Tara Jaeger: I agree that the conversation needs to happen K-12. What we found out is that our elementary and middle school teachers didn't really know what has been happening in our high school in terms of what students decide on for high school courses or how they positively or negatively being affected
Michelle Fuqua: Thank you!
Julie Wright: Thank you for this and all your other great work!
Carolyn Gray: Kate & Rebekah - thanks!
Tara Jaeger: Thank you Robert for getting this conversation going. Thank you to everyone who was able to contribute to the conversation. Keep learning :) 
Janet Herrelko: Greatly appreciate your comments and information!
DeAnn Huinker: Thanks!
Robin Schwartz: thanks for this opportunity
Kim Ward: Thank you! Very interesting conversation. I teach elementary math, and I can see how ability
grouping can lead to tracking in middle and high school.

Rachel Pomeroy: Thank you RQB, KK and all for a great evening. Feeling inspired tonight.

Robert Berry: Thank you. Sorry about ny dog

Jacob Martens: Thank you. Will definitely stay tuned for upcoming webinars. Looking forward to
reading Catalyzing Change.

Tara Jaeger: @Jacob -- definately a must read:)

Carolyn Gray: Yes - on gifted students

Carolyn Gray: Thanks!

Rob Matyska: KRISTIN There may be an issue with register for upcoming webinars. When you try to
nativatge past the page that lists all of them to REGISTER, it times/errors out.

Jacob Martens: Robert -- loved your dog. It will be an encouragement to me when things don't go
exactly to plan:)

Rob Matyska: it's the "unpacking fractions" session

Kate Okrongly: Looking forward to daylight savings time ending so these are at 5pm and not 4pm AZ
time. I have a class starting soon that goes until 4:30.

Susan Jaggers: thanks

Robin Schwartz: have agreat night tahnk you very much