

Norma Borenstein-Gordon:That's from yesterday! Good webinar!

Linda Loomis 3:I'm not getting sound, and I'm seeing the wrong webinar.

Matt Larson:The title slide was incorrect, but it is the right webinar

Norma Borenstein-Gordon:Glad to be here since #notatTMC18!

Kristin Keith:Linda, run audio set up wizard under meeting in upper left corner

Mike Steele:We're happy to collaborate with you all!

Randy Philipp:Glad to be with you, -Randy

M. Lynn Breyfogle:Thank you for the opportunity to collaborate. And a thank you to Sam Eskelson from AMTE for making the connection.

Sam Eskelson:Thanks, Lynn.

Mike Steele:AMTE colleagues: making sure our math department partners know about these purposes is important for our preservice math content courses.

Nicole Rigelman:Agreed Mike :)!

Lisa Heineman:New teacher here - what is meant by "tracking teachers"?

Norma Borenstein-Gordon:Lisa - I think that means strongest teachers teach strongest student

Karen Graham:Robert will discuss this a little later in his part of the webinar.

Mike Steele:That's right. I think Robert will unpack it more in a moment.

Lisa Heineman:Thanks Norma - makes sense, and agree this needs to go! Glad that a lot of schools already try to avoid this.

Norma Borenstein-Gordon:I am curious about what communities can do where "acceleration" is expected when stemming from external math instruction/courses

Mike Steele:We have some strange practices in math teaching with this, like the "geometry teacher." Years ago, I worked with a high school that looped teachers for 4 years with students. So many benefits to that!

Norma Borenstein-Gordon:That is an excellent section of the book!

Mike Steele:Norma, one of the first things I did was reach out to my local school boards and talked to them about this document. Also, getting them to look at data about who is being accelerated is powerful.

Mike Steele:(Spoiler alert: in most places, those accelerated students are White and middle to upper class, disproportionately.)

Norma Borenstein-Gordon:Mike, yes - and great idea to share for a broader read. I was also thinking our ES teachers, especially those less confident mathematically would benefit from reading since for many this message would resonate deeply if they didn't have a positive HS mathematical experience.

Mike Steele:That's a great idea, Norma.

Comfort Akwaji-Anderson:Comfort Akwaji-Anderson- I appreciate the idea of essential concepts

Jason Gauthier:Isn't there an assumption in this conversation that accelerated instruction tends to be somehow "better" than so-called regular instruction. I'd argue that this is oftentimes not the case.

Students deemed "worthy" are pushed hard toward shallow, procedure-based understandings of mathematics. I think this is where the equitable practices come to the fore and need to be developed fully.

Norma Borenstein-Gordon: Would love to have the 8MTP - EQUITY tables as a pdf on more4U - or is it already there?

Mike Steele: Good point, Jason. I think that's part of what Robert was getting at about not skipping content. For me, that also means not skipping conceptual understanding just to go more quickly.

Jason Gauthier: Absolutely. And I love the idea that students should demonstrate deep conceptual understandings of grade level content before being considered for acceleration. Go deeper before you go forward should be a mantra .

Lisa Heineman: Totally agree Jason! I am stunned that there are 10th graders taking AP Calculus BC! Math is the only subject where students are pushed (and usually not by their teachers) to plow through the material faster!

Mike Steele: I worked with a district here to give a conceptual assessment to all their high school students. One short 20 minute problem. When they saw their accelerated kids' performance was indistinguishable from the rest in terms of explaining their thinking, they were ready to change.

Jacob Martens: Mike: Curious to know what problem you gave them:)

Norma Borenstein-Gordon: +1 Jason - a challenge is creating tasks/formative assessments that demonstrate student 's depth of understanding

Jason Gauthier: Me too, Mike!

Norma Borenstein-Gordon: Me three!

Mike Steele: We took problems from Illustrative Math at Algebra I, Geometry, and Algebra II. Everyone past AlgII got the AlgII task.

Jacob Martens: Norma & Jason: what are your twitter usernames...

Jacob Martens: Okay -- thanks Mike:)

Norma Borenstein-Gordon: @normabgordon

Mike Steele: Calc AB kids looked just like AlgII kids. The data shocked them.

Jason Gauthier: Thanks, Mike!

Jason Gauthier: @jgauthier13

Jacob Martens: Thanks:)

Lisa Heineman: @lisakheineman

Norma Borenstein-Gordon: What are the thoughts about transitions from MS to HS?

Norma Borenstein-Gordon: and how this is connected to the Catalyzing Change purpose and message?

Mike Steele: The local community part is important. Math teacher educators, getting out to local schools and districts and talking about this document is good work for us to do.

Dee Crescitelli: Are we having these conversations with college admissions folks?

Norma Borenstein-Gordon:I am half way through - taking my time (so many post-its being added) so didn't get there yet!

Norma Borenstein-Gordon:Thanks

Jason Gauthier:These are difficult conversations to have, even under the most benign circumstances. Is NCTM working on supporting resources for teachers in continuing these conversations in the face of the pushback they are likely to receive?

Comfort Akwaji-Anderson:This conversations should/is going to be a critical part of a school district's curriculum review process

Mike Steele:Good question, Dee. In Wisconsin, our AMTE group has been trying to get high school guidance counselors and college admissions officers into the conversations.

Dee Crescitelli:Thanks, Mike!

Norma Borenstein-Gordon:What conversations are you hearing since in some state (MA - for example) HS grad assessment is in 10th grade

Norma Borenstein-Gordon:along those lines as well connections to AP courses.exams

Lisa Heineman:So when does the book on change in post-secondary mathematics education come out? :)

Jason Gauthier:That's great! Thanks, Matt! And the letter about SFUSD was great!

Rob Matyska:As HS Calculus is seen by the majority (of parents) as being the "holy grail" of HS mathematics, how do we educate regarding the importance of statistics for secondary students--- particularly since it is central to business and social science majors at the university level.

Mike Steele:For those with nearby ed schools, your math educators there can partner with you to help advocate and evangelize.

Jacob Martens:I'm from Vancouver BC. We are just finishing up a K-12 learning standards revision -- gr 11 & 12 implementation this year and next. This conversation has given me a lot of food for thought of what we can leverage in the newly structured standards.

Mike Steele:Lisa: the MAA recently put out an instructional practice guide that resonates with these ideas.

Norma Borenstein-Gordon:Jacob - Vancouver is on my wish list! What's your twitter handle?

Jacob Martens:Looking forward to reading the book and identifying opportunities in my context. This has been very helpful.

Jacob Martens:@renomyclass

Jacob Martens:My role is district coordinator/math coach for 24 K-7 schools and 7 gr8-12 schools.

Norma Borenstein-Gordon:Does this suggest new curriculum/texts? How/what are publishers doing/saying?

Lisa Heineman:Great news Mike!!!

Mike Steele:Norma, I think it will. Especially the geometry in 9th grade idea.

Jacob Martens:Here's what's happening in math in BC
<https://curriculum.gov.bc.ca/curriculum/mathematics>

Norma Borenstein-Gordon:Great - MTMS?

Jacob Martens:FWIW: We call our learning standards "curriculum".

Norma Borenstein-Gordon:I like how the journals are publishing same themes - great for K-12 PD

Jacob Martens:Our teachers are having to develop/revise their existing curriculum. And publishers are focusing on textbooks for gr8-12.

Dee Crescitelli:Focus really matters! It has been a great thing for k-8!

Norma Borenstein-Gordon:connections/implications to AP courses?

Randy Philipp:Thank you, again. AMTE is with you on this!

Mike Steele:Jacob, I recently wrote a book about a district that has done that well over the past three decades. Might be helpful.

Norma Borenstein-Gordon:Thank you!

Jacob Martens:A lot of questions that are contextual (and likely will be answered by reading Catalyzing Change... ordering it now:) Thanks to the presenters (and the participants change). Thanks AMTE.

Jacob Martens:Mike: What's the title?

Jacob Martens::)

Comfort Akwaji-Anderson:Thanks to the presenters

Mike Steele:A Quiet Revolution. Information Age publishing

Jacob Martens:Looking forward to next week's webinar.

Jacob Martens:Thanks mike:)

Lisa Heineman:Loving these webinars! Until I land a teaching job and can start attending conferences!

Mike Steele:Thanks NCTM!

Robert Berry:Thank you everyone