

00:21:04 Kevin Dykema: Hi from southwest Michigan!
00:21:09 Emily Kavanagh: Columbia, MD
00:21:12 Trena Wilkerson: Hello from Waco, TX! Excited for the
session!
00:21:24 Leslie Brown: Chesterfield, VA
00:21:35 Edmond Lau: Hi. This is Edmond from Hong Kong.
00:21:36 Trena Wilkerson: Hi Kevin!
00:21:57 Colleen Mathews: Hi from Orange County, CA
00:21:58 Michelle Cirillo: Hello from the PA/DE border!
00:21:59 Sahar Alkhatib: Hello from Chicago.
00:22:03 Charles Thinnes: Charles from Madison Indiana.
00:22:03 Kevin Dykema: H Trena! Thanks to our presenters tonight- looking
forward to learning from you
00:22:04 Trena Wilkerson: HI Edmond! Excited to have you here from
Hong Kong!
00:22:04 Jaclyn Murray: Augusta, GA
00:22:18 Edmond Lau: Hi, everybody. This is Edmond from Hong Kong.
00:22:29 Esther Winikoff: Hello from Pittsburgh, PA!
00:22:34 Shruti Raman: Hello , Shruti from FL
00:22:56 Ralph Pantozzi: HI Michelle!
00:23:09 Michelle Cirillo: Hi Ralph!
00:23:14 Lorraine Howard: Hello, David. Always GREAT to "see" you!
00:23:24 Ralph Pantozzi: 😊
00:23:39 Marian Dingle: Hello Everyone! Marian from Atlanta here.
00:23:55 Steven Leinwand: Hello all!
00:23:59 Ralph Pantozzi: HI! thanks for being here :-)
00:24:04 Nolan Fossum: Hi friends!
00:24:15 Lorna Randle: Hello
00:24:20 Ralph Pantozzi: hi Steve!
00:24:31 Lorraine Howard: Hi Chonda. If you're here, it's good to know
you're near. :-)
00:26:55 David Barnes (he/him): Chonda has the night off.
00:27:32 Andrew Cardine: Hi everyone
00:31:32 DeGraft Adegbite: Hi everyone!
00:31:58 DeGraft Adegbite: Adegbite, from Cleveland Ohio
00:32:23 Mina Sedaghatjou: Hello all! Mina from Alfred University, NY
00:33:06 David Barnes (he/him): Hi Mina.
Would you change your chat to go to Everyone so they can see your posts?
00:33:20 Peter Sorensen: I wonder why we are dividing by 45
00:33:40 Mina Sedaghatjou: Oh sure!
00:34:03 W Tad Johnston: sure need to know $x+y+z = 180$
00:34:12 Mina Sedaghatjou: Hi all! Mina from Alfred University, NY
00:34:20 W Tad Johnston: substitution
00:34:35 Sahar Alkhatib: Solve for a variable and use substitution.
00:34:39 Charles Thinnes: substitute for y and z
00:35:27 Charles Thinnes: organize using a table
00:35:33 Nolan Fossum: Drawing a representation
00:35:34 Anne Feeney: take it in bite-sized pieces
00:35:44 Edmond Lau: Draw a picture, maybe?
00:35:45 W Tad Johnston: put an insurance cost with the three value

00:35:46 Sahar Alkhatib: each package seperately
00:36:00 Leslie Brown: drawings/representations
00:36:01 Joanna Sabatino: organize with a list
00:36:11 Lorna Randle: I was just going to say chunky
00:36:21 Andrew Cardine: I appreciate your review of the GRE, I have only been teaching for a few years, after coming out of industry, and it seems like a good way of starting out. In other words, know what they need to know to get their GRE and ensure that your approach to the classroom gets these basics across. Not to limit what we do in the classroom, but to stop us from feeling like we're not getting enough across in our courses.
00:36:24 Michelle Cirillo: The literacy demands of these standardized math tests have increased significantly over time.
00:36:53 Sahar Alkhatib: Hard to read..very small print
00:37:02 Duaa Bakheet: Weather the shape is square?
00:37:05 Joanna Sabatino: use the PT to find the length of the rectangle
00:37:36 Leslie Brown: @Joanna....agreed!
00:37:40 Peter Sorensen: The method of entering the answer...
00:38:22 Steven Leinwand: It's very hard to see how any of these GRE items motivate much interest.
00:39:11 W Tad Johnston: Might make you feel good if you "see" the easy way to do it :-)
00:39:33 David Barnes (he/him): Also analyze from the perspective of the test writer to understand what elements of the context they want the taker to focus on.
00:39:39 Duaa Bakheet: 2
00:39:44 Peter Sorensen: 1.5
00:39:48 W Tad Johnston: with a glass of wine, 3
00:39:55 Jennifer Cosby: 2
00:40:04 DeGraft Adegbite: 2
00:40:11 Michelle Cirillo: 3
00:41:58 W Tad Johnston: I estimate 80% of US teachers are not CCSSM, states that did not adopt, so not everyone
00:42:29 Trena Wilkerson: Wonder, Joy and Beauty!
00:43:20 W Tad Johnston: The agency and identity sections at each level are definitely worth the read.
00:44:57 Jay Schiffman: irrational numbers fill the number line.
00:45:46 Andrew Cardine: The interest of the student doesn't always align to what we know they should be capable of. We have to help them to see the beneficial uses of mathematics in their existing interests. This will grow their desire to play with our field and sign up for future courses of study.
00:46:38 Leslie Brown: @Andrew....agreed! We have to make it applicable to them and help students seem themselves in the world of mathematics.
00:46:52 W Tad Johnston: 2
00:46:52 Leslie Brown: 1
00:46:52 Edmond Lau: 2
00:47:00 Shruti Raman: 2
00:47:17 Jennifer Cosby: 2
00:47:59 DeGraft Adegbite: 2
00:50:28 Jay Schiffman: Also the power of mathematics.

00:50:48 Nolan Fossum: ... or why a taco IS a sandwich
00:51:04 Marian Dingle: Ha!
00:51:19 W Tad Johnston: Math is all about definition :-)
00:51:30 Shruti Raman: so true!! achieve the potential that they innately have!
00:51:49 Steven Leinwand: @Nolan: or why a taco is not a sandwich.
00:52:22 Anne Feeny: They spread out pretty evenly in each direction
00:52:24 Edmond Lau: Two lines formed?
00:52:31 DeGraft Adegbite: Movements
00:52:47 Shruti Raman: the entire line up has shifted one space in either direction
00:52:57 Peter Sorensen: half back?
00:53:00 Nolan Fossum: @Steven... always rousing the rabble, eh? 🤔
00:53:13 W Tad Johnston: nice demo
00:53:27 Andrew Cardine: neat idea
00:53:36 Marian Dingle: Love this!
00:53:37 Mina Sedaghatjou: A normal distribution curve... Step by step...Great one!
00:53:37 Steven Leinwand: Never the rabble.
00:53:41 Michelle Cirillo: Very fun!
00:54:08 Anne Feeny: Almost a normal curve
00:54:11 Leslie Brown: bell curve
00:54:15 Peter Sorensen: "normal" distribution
00:54:30 W Tad Johnston: not quite normal
00:54:39 Leslie Brown: Great visual!!!
00:54:46 Michelle Cirillo: How did you get 100 kids at once?
00:56:03 Steven Leinwand: The visual connections are SO nice.
00:57:58 Jay Schiffman: Climate change and its ramifications.
01:02:01 Nolan Fossum: WE, we are the obstacles far too often
01:03:59 Jay Schiffman: True when we show and tell rather than empower all students.
01:05:41 Jay Schiffman: Allot time in class for all students to explore and discover.
01:05:42 Marian Dingle: Joy. Yes.
01:06:24 Andrew Cardine: I think we put a lot of pressure on ourselves to cover every bit of the curriculum that we see laid out in a textbook, instead of finding the opportunities for the work our students do to prove that they are capable of mathematical reasoning
01:06:44 Andrew Cardine: yes, we are all human
01:06:53 Jay Schiffman: Mistakes serve as opportunities, not barriers.
01:07:38 W Tad Johnston: Powerful call to examine the value of coin problems and other contrived contexts
01:07:53 DeGraft Adegbite: And that is so because of Standard Testing
01:07:55 Lisa Winters: When mistakes are allowed to happen, our teaching is informed and responsive to student needs. Otherwise our work is based on nothing more than a guess, really as to what our students are most needing.
01:08:11 Steven Leinwand: Ralph is providing a primer on teaching as a subversive activity!
01:08:42 Nolan Fossum: Thank you Ralph! That's a word
01:08:49 Nolan Fossum: Thank you Natalie!

01:08:55 Mina Sedaghatjou: Thank you!!! I have a question, if time permits: There are some ECCE pre-service teachers that are resistant to the new math movement, especially in the rural outskirts areas. They are not open to exploring different problem-solving strategies, and they are not willing to take an extra step and learn WHY "rules" work. Even if they do, their mentor teachers won't let me try. What would you suggest to tackle these issues?

01:08:56 Michelle Cirillo: Yes, very powerful words. Thank you.

01:08:59 Jay Schiffman: Sometimes less is more. Covering the syllabus does not necessarily translate to effective teaching.

01:09:10 Jennifer Cosby: so helpful! great things to think about.

01:09:17 Edmond Lau: Thank you, both of you.

01:09:33 Mina Sedaghatjou: Thank you so much for your wonderful presentation!

01:09:33 Marian Dingle: Thank you both.

01:09:34 Jay Schiffman: Fabulous ideas!

01:10:25 Shruti Raman: lots of food for thought - thank you both!!

01:10:56 Carin DeClute: Thank you Dr. Johnson and Mr. Pantozzi!

01:11:42 Dr. Natalie Johnson: Thank you everyone for allowing us to share our perspectives on Catalyzing Change in mathematics.

01:14:12 DeGraft Adegbite: Please the email again!

01:14:18 Brittany Marklin: If not questions arise, please feel free to ask how the award has changed their lives

01:14:22 Brittany Marklin: if no*

01:14:37 Edmond Lau: Dr. Johnson, Is there any good ways to help teachers like us to learn about the interest and career inspiration of shy students?

01:15:18 Mina Sedaghatjou: Early Childhood- Childhood Education = ECCE

01:15:46 Jennifer Cosby: Yes, many teachers are resistant to change.

01:16:21 Mina Sedaghatjou: Thank you, Natalie!! Very good points...

01:16:49 W Tad Johnston: In the words of Pogo (Walt Kelly), "we have met the enemy and it is us."

01:16:55 Anne Feeney: Ask them, "Do you remember your math class in school? Did you like it?" When they say, "no", then say, "Why should we keep doing the same thing then??"

01:17:11 Andrew Cardine: I would also welcome some opinions on how to engage students who have already decided that "I'm not good at math" which I always try to respond to if I hear it in a positive manner, but it's hard when they've already set themselves in this category.

01:17:22 Ron Yoder: I love it. Lesson by lesson! :-)

01:17:25 Mina Sedaghatjou: Thank you, Ralph! So true.

01:17:28 Emily Kavanagh: Thanks

01:17:40 Jennifer Cosby: Thank you!

01:18:43 Jennifer Cosby: Good idea! Building a positive relationship is important

01:18:44 Mina Sedaghatjou: @Andrew, have you read about "Thinking Classroom" method introduced by Dr. Peter Liljedal? It REALLY a game changer

01:18:48 Edmond Lau: Thank you

01:19:02 Jennifer Cosby: A lot of students say that

01:19:13 Mina Sedaghatjou: * is

01:19:15 Andrew Cardine: Yes, I have a book study on that coming up as well, which I'm looking forward to

01:19:17 Jay Schiffman: Always, sometimes or never, what if? Which one does not belong? are nice routines to engage students.

01:19:47 Trena Wilkerson: What do you notice? What do you wonder? provides space for all to engage and contribute.

01:19:50 Lisa Winters: I appreciate that within Catalyzing Change there is emphasis placed on dismantling structures of inequity. We are currently working within our district to implement an intervention block. Even within this block of time, I am working to challenge teachers to consider this work within the context of mixed ability groupings. It is certainly much easier to think about this work in ability groups, but as teachers really ask why can't they work within these mixed ability groups, they struggle to answer as they are having success and students are having success. We are really working to avoid creating fixed mindsets in the minds of students.

01:19:53 Jennifer Cosby: Andrew, what is the title of the book?

01:20:18 Andrew Cardine: Thinking classrooms

01:20:45 Edmond Lau: 😊

01:20:45 Mina Sedaghatjou: Is that okay if I share this in the chat?
<https://www.amazon.com/Building-Thinking-Classrooms-Mathematics-Grades/dp/1544374836>

01:20:52 Jennifer Cosby: Having lunch with students works so well!

01:21:04 Trena Wilkerson: Sure! @ Mina!

01:21:06 Ron Yoder: I just bought that book (Thinking Classrooms) on the recommendation of a Presidential Excellence in Mathematics and Sciences Finalist in my state. :-)

01:21:09 Jennifer Cosby: They open up their minds and try

01:21:16 Carin DeClute: Building Thinking Classrooms in Mathematics by Peter Liljedahl ISBN 9781544374833

01:21:25 Jay Schiffman: Be positive!

01:21:59 W Tad Johnston: Isn't ability to do math genetic if we think all can do it? It's just yes for everyone instead of some

01:22:28 Andrew Cardine: That's some great ideas, the personal touch is one I try for, sometimes it's successful and other times it's not, but I guess the message is to keep trying

01:22:51 Mina Sedaghatjou: Thanks Trena. Information is already up in the chat :)

01:22:53 Dorothy Groover: Thank you!

01:22:54 Edmond Lau: Thank you for organizing!!!

01:23:06 Ron Yoder: Do we have access to the slides and/or recording of this? (sorry if you've already mentioned this)

01:23:08 Shruti Raman: Thank you so much!

01:23:09 Mina Sedaghatjou: Thank you every one! Can you paste the link in the chat?

01:23:10 Andrew Cardine: Thanks all, I'm glad for the links to explore more

01:23:19 DeGraft Adegbite: Thank you!

01:23:36 Ralph Pantozzi: yes slides and recording will be available

01:23:55 Trena Wilkerson: <https://www.nctm.org/change/>

01:24:06 Jennifer Cosby: it was awesome! Thank you

01:24:11 Ron Yoder: @Trena, thank you!

01:24:19 Michelle Cirillo: Thanks all!

01:24:25 Mina Sedaghatjou: Thanks, everyone!

01:24:30 Peter Sorensen: Thank you!

01:24:31 W Tad Johnston: Thanks presenters for putting yourselves out there
for us.
01:24:50 Ron Yoder: Thank you!!!
01:24:51 Jennifer Cosby: Thank you!
01:24:52 Sahar Alkhatib: Thank you
01:25:02 Karen Mae Ozoa: Thank you