

00:18:11 Angelita Beltran: Hello from Waukegan, IL
00:18:12 Melonie Smith: Hello from Chicago
00:18:16 Geoffrey Enriquez: New York City, High School Math
00:18:16 Sheila Kirton-Robbins: Hi from Nashville, NC
00:18:17 Marianne Mammon: Hello from NJ
00:18:17 David Barnes: Hello all from Lansdowne, VA
00:18:20 Anh Le: Hello from San Leandro, CA
00:18:20 Cal Armstrong: Hello from outside Toronto! (Happy Canada Day!)
00:18:20 Ana Guerrero: Hello from IL
00:18:21 Tanya Dewland: Hi from Tucson AZ
00:18:23 Barbara LaPenta: Hello from Philadelphia, PA
00:18:24 Eunice Dimasangal: Hello.. Good morning.. Watching from
Indonesia.
00:18:25 Brittany Miller: Hello from Kentucky
00:18:25 Trena Wilkerson: Hello from Waco, TX!
00:18:26 Robin Koller: Indiana
00:18:26 Heather Graham: From Illinois :)
00:18:28 Justin Klinger: Hello from Romeoville, IL
00:18:29 Stacey King: Hello from Washington Michigan
00:18:29 Steven Jarowski: WV
00:18:31 Karin Leonard: Hi from Denver
00:18:31 Jorge Veloso: Hi from Angola.
00:18:31 Gloria Carrasco: Hi from Hollister, Ca
00:18:31 ANALINE BAUTISTA: hello! Philippines here
00:18:31 Jennifer Rolling: Baltimore, MD
00:18:33 Nancy Turner: Hello from Tucson, AZ
00:18:34 Sharon Black: hello from New Brunswick, Canada
00:18:34 Lorie Huff: Hello from Fayetteville, Arkansas
00:18:35 jeanine colwell: hello from Newport NC
00:18:35 Jaclyn Murray: Hello from Cumming, GA
00:18:36 Viragni Chand: Hello, from California
00:18:36 dana dulzo: hello from dana novi mi
00:18:36 Karoulin Aljoris: hi from Michigan
00:18:37 Esther Winikoff: hello from Baltimore!
00:18:37 Dawser Al-Adhami: Hi from Ann Arbor , MI
00:18:37 Brittney Melnick: Hi everyone from Cape Breton, Canada! HAPPY
CANADA DAY!!
00:18:38 Jeff Shih: Hi from Brunei :)
00:18:38 Katrina Hall: HI from NH
00:18:38 Gina Buran: Cincinnati OH
00:18:39 Christy Werner: Hello from Shillington, PA
00:18:39 Ruth Glasgow: Hello from Sydney Australia
00:18:39 Rita Shamrock: Hi from Rita in Senoia, GA
00:18:40 WARASABON DOMINIKUS: hello from Indonesia
00:18:40 Michael Lanstrum: Hello from Cleveland, OH
00:18:41 Portia Felder: Greetings from Atlanta, GA
00:18:42 Karoulin Aljoris: hello all
00:18:43 W Tad Johnston: Greetings from our nation's capital
00:18:44 catherine abbott: Hi folks. Cate from Maryland
00:18:44 India Puch: India from Columbia,sc

00:18:45 Veronica Kwok: Queens, NYC!! Hello!
00:18:45 Wilma Besin: hello,good morning here in Cebu Philippines
00:18:46 Dave Becker: Windermere FL here!
00:18:49 Dr Deborah Smith: Hello from Antioch, TN
00:18:49 Tonya McIntyre: Hi from Wadmalaw Island, SC ☺
00:18:49 Linda Koval: Hello from Bealeton, VA.
00:18:51 Sheila Bishop: Hello from Southern NH
00:18:52 Patrick Montague: Hello from Weslaco, TX
00:18:52 PALOMA CARRERA-ANDINO: hi from El Paso, Tx
00:18:56 Ann Assad: Hello from Paducah KY
00:18:57 Kieron Redford: Hi from Oregon
00:18:58 Cassandra Gardner: Hello from Jonesboro, GA
00:18:58 Pamela Liegl: Hi from Streator, IL
00:18:58 Nell Thurlow: Hi from Lafayette LA
00:18:58 Cheryl Gipson: Hello from Bartlett, TN
00:19:01 Francis Kisner: Another Beautiful Day in Pennsylvania
00:19:05 Nick DiGrispino: Hello from hot and humid Lansing IL!
00:19:05 RATI JONEJA: good morning Rati from India
00:19:08 Stacy Haines: MYSTIC CT
00:19:08 Dr. Yankey: GA
00:19:09 Nora Marasigan: Hello from Philippines
00:19:12 Valerie Vanderport: hello from Everett, WA
00:19:15 Dalila Rivera: Hello from Kingsville,Texas
00:19:16 Ming Ho: Hi from San Leandro, CA, in the SF Bay Area!
00:19:17 Jennifer Rolling: hello @Esther from Baltimore! Also from
Baltimore.
00:19:17 Olga Kosheleva: Hello from El Paso, TX
00:19:19 Emerlina Binuya: Hello! I'm Emerlina from Petersburg, VA
00:19:22 Katherine Raiguel: Hello from Willow Grove, PA
00:19:22 Laurie Harrell: Hello from Harpers Ferry, WV
00:19:22 Natasha Gambarov: Hello from Boston, MA
00:19:23 Jamie Cook: hello from Mesa, AZ
00:19:26 LANY JAMERO: good morning from Philippines
00:19:26 Mary Simmons-Chatmon: Mary from DC
00:19:29 Carly Jardinier: Hello from Western M
00:19:34 Noe Eugenio: Hi from Philippines
00:19:36 Carly Jardinier: Western MD :)
00:19:37 Patricia Daugherty: San Francisco, CA
00:19:37 Galaxy J2 Core: Good morning from Philippines.
00:19:40 Bruce Graham: Hello from Durham NC!
00:19:42 Teresa Bulanda: Hello from Connecticut:))
00:19:42 Trena Wilkerson: HI Olga! SO glad you are here!
00:19:43 catherine abbott: How can I set u the screen realestate so the
chat box does not over lap presenter screen?
00:19:44 ANAIRIS DE LA CRUZ BENITO: Hello from Tallahassee, FL
00:19:49 Dewey Gottlieb: Aloha from Hawaii!
00:19:51 Kathy Medrick: Hello from Cleveland, OH
00:19:57 Lawanda Mahomes: Hi guys! Chicago, Illinois
00:20:03 Lesly Brown: Hello from Knoxville, Tennessee and Lesly Brown.
00:20:04 David Barnes: Hello all and

HAPPY CANADA DAY

to all our friends up north!

00:20:04 Catherine Bronikowski: Hi from Milwaukee, WI
00:20:06 Dave Hankin: Hello again from Globe, Arizona!
00:20:06 Lotalinda Castro-Anderson: Hello from Philly!!!
00:20:17 Lana Lui: hello from California
00:20:17 Shashidhar Belbase: Hi from UAE.
00:20:22 Dave Hankin: I'm originally from Philly!
00:20:23 Corinne DeLuca: Hello from California
00:20:24 Crystal Moyer: Crystal from Bealeton, VA
00:20:25 Joseph Townson: Good evening from New York City :)
00:20:30 Art Scrivener: Hello from Eminence, Kentucky
00:20:31 Emma Farrow: Hello from Cincinnati!
00:20:32 Stephanie Thomas: Hi from Birmingham, AL
00:20:32 Laura Cranmer: Hello from Colorado
00:20:33 Jessica Edrington: Hello from Indiana!
00:20:34 Aya Zvaigzne: Nashville, TN represents
00:20:35 Christina Tully: Hi from Las Vegas, NV!
00:20:36 Corinne DeLuca: I am originally from Philly too!
00:20:36 Rob Matyska: Caruthersville MO
00:20:38 Sharon Black: Thanks David Barnes!!
00:20:38 Philip Mojares: Hi from Somerton, AZ
00:20:39 Samantha Kabe: Hello from Jersey :)
00:20:39 Bryan Bagala: Hi from Westchester, NY
00:20:40 La Keisha Leonard: Dallas, Texas!!
00:20:41 Jenny Sagrillo: Hi from Milwaukee!
00:20:41 Susan Kile: Hello from Texas
00:20:42 Alexandra Groseta: hi from az
00:20:42 Christina Lee: Hello from CA
00:20:42 Rebecca Kleinbart: Hi from New York City! :)
00:20:43 Nancy Davis: Hello from Atlanta!
00:20:48 Mary France Imperial: Hello from Philippines
00:20:49 Jim Buckley: hello from Phoenix to all
00:20:54 Myrna Cabrerros: hi Good evening from MD
00:20:56 Wilma Besin: hello
fr Cebu City Philippines
00:21:00 Mary Fisher: Hi from Kansas City, MO
00:21:08 Keisha Davis: Hello from Severn, MD
00:21:18 Carolina Obregon: Hi from Pasadena, Ca
00:21:18 Corvina Boyd: hi from Arizona
00:21:19 Daniel Irving: Hello from North Providence, RI!
00:21:19 ALEX QUYENVO: hi from Indiana
00:21:20 Jamie Herd-Tesson: Hello from Stuart, Florida
00:21:21 Fyniss Nixon: Hello from Charlotte, NC
00:21:21 Alessandra King: hi again from DC
00:21:22 Jelsi Bolt: Hi from Chicago!
00:21:22 LeAnna Deveaux-Miller: Good Evening From-New Providence, THE
BAHAMAS
00:21:25 Lara Staker: Hello from Fredonia, KS
00:21:27 Katherine LeDuc: Hello from Connecticut!

00:21:31 Rolando II Delos Reyes: Good morning from Manila Philippines! PH
00:21:31 Andri Rahadyan: hi from jakarta
00:21:33 Melissa Castillo: Hello from San Antonio, Texas
00:21:42 Babajune Banihashemrad: Hello from Austin TX
00:21:42 Maria Found: Hello from the White Mountains
00:21:43 Rachell Scott: Hello from Maryland!
00:21:46 Patricia Posey: Hi from Hattiesburg, MS
00:21:47 Laura Semian: Hello!
00:22:03 Erika Hassay: Hi from Austin, TX!
00:22:11 Laura Semian: Hi from Sarasota, FL
00:22:18 Pallavi Narain: Hello from Nashville!
00:22:19 Jonathan Abellera: Hello from Texas!
00:22:26 Claudia O'Keefe: Hi from Buffalo, NY - wishing our neighbors
a Happy Canada Day!
00:22:28 Danielle Leger: Hey from Danielle! Irmo, SC
00:22:31 Denise Walston: Hi from Chesapeake Virginia
00:22:37 Abdul Razak Othman: Hi Abdul Razak from Malaysia
00:22:43 Michelle Funai: Aloha from Honolulu, Hi!
00:23:23 Lisa Cady: Hello from Richmond, VA. Go SU!
00:23:25 Andy Mitchell: Go Kevin! From Rochester, NY
00:23:28 Pascal Despeignes: Hi
00:23:32 Dave Hankin: Is it me or did Zoom change their look a bit??
00:23:34 Michael Chrzan: "What up doe?!" From Detroit, MI - classic greeting
here haha.

00:23:43 Laura Semian: This is so great... people from all over the world!
-Laura in Sarasota, FL
00:23:47 Ron Napper: Hello from Murfreesboro, TN
00:23:48 Jeanetta Glass: Hello from Memphis, TN!
00:23:52 Jaime Krause: Happy birthday!
00:24:02 Laura Semian: HAPPY BIRTHDAY!
00:24:04 Trena Wilkerson: Happy Birthday!
00:24:04 Dr. Yankey: happy birthday
00:24:12 Linda Pritchett: Hello!
00:24:14 Jennifer Gailey: Hello from Ashand, VA
00:24:22 Katherine Gleason: Hello from Crofton MD!
00:24:23 Mohamed Jamaludeen Thirapusa Mohaideen: Happy Birthday !!
00:24:23 Pascal Despeignes: Happy birthday
00:24:30 Rachell Scott: Happy Birthday!!
00:24:35 Sharon Black: Happy Birthday:-)
00:24:41 Rosalyn Bantay: Happy birthday 🎉🎊
00:24:47 Alma Miho: Hello from Carol Stream, IL
00:24:49 Rachael Williams: Rachael Williams from Lake Charles,
Louisiana
00:24:51 Dr. Yankey: congratulations
00:24:53 catherine abbott: Hey Crofton MD
00:24:53 Genesis Docena: hello from Washington DC
00:24:56 Hannah Tully: Hannah Tully, living in Phoenix, Arizona.
00:25:05 Rosalyn Bantay: Hello from Philippines
00:25:14 Howie Hua: Hello from Fresno, CA

00:25:20 Rebecca Zlotnik: Hello from Becky in NJ
00:25:20 Bishnu Khanal: Hello from Kathmandu, Nepal
00:25:33 Lesa Turner: Hi from Springfield, Tn
00:25:34 ALEX QUYENVO: you didn't like math, but at least you didn't say
"I'm not a math person" hihi...
00:25:34 Lyubov Presnetsova: Hi from Northern VA
00:25:34 Linda Pritchett: Happy Birthday
00:25:39 Pascal Despeignes: Pascal Despeignes from Providence Rhode
Island
00:25:49 Sara VanDerWerf: Greetings from Minneapolis, MN
00:25:55 Dawser Al-Adhami: Many students doesn't like Math:(
00:26:08 Jaime Krause: I used to hate math too. I'm glad I'm not alone! :)
00:26:11 Laura Semian: SO COOL to hear your experience!
00:26:19 MaryJo Swann: Hello from Kansas!
00:26:27 Sharon Valentine: Hi from Havertown PA
00:26:35 Keisha Davis: Math ED
00:26:37 Denise Walston: good to hear your story
00:26:38 Janice Magauay: Janice from Maryland, 8th grade Math
00:26:38 Nuria Linares: Hello from Denver, CO
00:26:41 Rolando II Delos Reyes: Similar story! Had a bad time with Math in
basic education. It was in college that I began loving Math. I wanted to change the
experience of children also regarding Math :)
00:26:44 Lisa Cady: Yeah, I didn't like math in high school either.
00:26:47 Mohamed Jamaludeen Thirapusa Mohaideen: Greetings from Mohamed from
Hartford, CT.
00:26:48 Rebecca Keller: Hello from outside Chicago
00:26:51 Jennifer Winne: Hello from Albany, NY
00:27:00 Beth Kobett: Love hearing the stories! our stories are so
important.
00:27:01 catherine abbott: Watch Dan Meyer's TEDTalk "Math Class Needs
a Makeover"
00:27:25 Sharon Black: That is a great TED Talk
00:27:52 Melissa Luzano: Math was always my favorite subject but usually not
my favorite class.
00:27:55 Denise Walston: so cool
00:28:00 Dongsheng Zhang: Math is a tool for Science and Tech. It
can't be too hard at High School level
00:28:11 Yoga Dwi Windy Kusuma Ningtyas: Hi... I'm Yoga Dwi Windy Kusuma
Ningtyas from Indonesia ID
00:28:22 Cynthia Luna-Dulgov: Math was never my favorite subject in high
school
00:30:00 Jeanetta Glass: Attended an awesome webinar with Zaretta today!
00:30:00 Dawser Al-Adhami: I loved Math since I was in Middle school
00:30:03 Laura Semian: being "in tune"
00:30:11 Sheila Kirton-Robbins: CRS is inclusive
00:30:15 Natasha Gambarov: collaboration of prior knowledge from each
student
00:30:17 Melanie Dickson: Highlights students' unique strengths
00:30:17 Barbara LaPenta: Knowing who and what backgrounds your
"kiddos" come from

00:30:18 Heather Graham: relating to experiences that are outside your own box

00:30:18 Emma Farrow: respecting different ways of thinking and problem solving

00:30:19 Aya Zvaigzne: authentic, open, honest communication based on trust

00:30:21 Portia Felder: I like "honoring and respecting"

00:30:24 Keisha Davis: responsible

00:30:24 Patti Wallace: life experiences

00:30:25 Rebecca Zlotnik: using language students can relate to

00:30:25 Geoffrey Enriquez: using knowledge of students to drive instruction

00:30:26 Cheryl Gipson: Allowing students to see themselves in problems

00:30:26 Jenny Sagrillo: CRP is humanizing

00:30:28 Dr Deborah Smith: is inviting to everyone.

00:30:29 Shashidhar Belbase: Transformative

00:30:30 Michael Chrzan: a fancy way to say "get to know your students and include them"

00:30:30 Lisa Cady: Responding to the evolution of our and our student's cultures

00:30:30 Lorie Huff: experiences that students can relate to and with

00:30:31 W Tad Johnston: honoring the culture of students

00:30:31 Patti Wallace: life experiences

00:30:33 Nick DiGrispino: getting to truly know your students

00:30:33 Mark Vasicek: relevant

00:30:33 Maya Severns: Relevant to students and their experiences

00:30:34 catherine abbott: Helping students see math around them and bring it to class

00:30:34 Sharon Black: respectful

00:30:34 Nancy Davis: Learning and respecting differences

00:30:35 Linda Pritchett: understanding learners' needs

00:30:35 Masooma Razzak: Authentic and context based

00:30:36 Shannon Hammond: Honoring different methods they bring to the class

00:30:37 Eniola Ajayi: Honoring and respecting

00:30:38 Patricia Posey: Knowing and relating the subject matter to be real to the students

00:30:38 Dawser Al-Adhami: Respect

00:30:38 Wenny Liao: Math is universal language

00:30:40 Sharon Black: relevant

00:30:41 Rolando II Delos Reyes: It takes consideration of many diverse experiences of children

00:30:42 Rebecca Keller: builds relationships

00:30:42 Jeanetta Glass: free of microaggressions

00:30:42 Maria Found: Positive perspectives on families (includes students and and parents)

00:30:43 cynthia dsouza: respecting their cultural heritage and asking them to build on their strengths

00:30:43 Dewey Gottlieb: validating and building upon the prior knowledge and the perspectives of all learners

00:30:43 Donna Misciagna: including students real world experiences

00:30:43 Howie Hua: You use math to make sense of THEIR world
00:30:45 Linda Koval: Put yourself in their shoes.
00:30:46 Ana Guerrero: considering students' culture when creating tasks
00:30:46 Nancy Turner: I think that culturally responsive means respected
students' perspectives based on their ages, their backgrounds
00:30:46 Barbara LaPenta: Showing vulnerability
00:30:47 Portia Felder: honoring the whole child
00:30:47 Laura McGuigan: Recognizing who students are and where they come
from
00:30:48 Lyubov Presnetsova: student's voice and choice
00:30:50 dana dulzo: awareness of their prior knowledge and prior
experiences
00:30:51 Allison Felton: CRT Culturally responsive teaching as well as CRT
community responsive teaching
00:30:53 Sharon Valentine: empathy across cultures
00:30:54 Marianne Mammon: high expectations
00:30:54 Marion Athearn: students welcomed as their whole selves
00:30:58 Laura Semian: making it relevant... as difficult as sometimes it
is...
00:31:03 Viragni Chand: Revitalizing math to something that students can
relate to.
00:31:07 Melissa Luzano: CRP does not ignore politics
00:31:10 Emerlina Binuya: having a good relationship with students and
the pedagogy
00:31:10 Michelle Webb: I just got that book in the mail today :)
00:31:31 Patti Gawronski: I love the Dreamkeepers book!
00:31:31 Nuria Linares: culturally responsive teaching is keeping an open
mind for all students. Receive who they are with an kindness and staying open to
what they bring as a person to the classroom
00:31:40 Andre ChenFeng: It is not only about caring about students and
having anti-deficit teacher beliefs. It is a critical understanding the historical,
political, and structural impacts of white supremacy so that Culturally Responsive
is not transactional but transformative.
00:31:46 Jeanetta Glass: @Michelle I am looking for someone to start a book
study for it.
00:32:15 Dawser Al-Adhami: Students love students center
00:32:17 Michelle Webb: @Jeanetta I'm in
00:32:17 Melissa Luzano: Yes @Andre
00:32:39 Nicole Walden: Nicole from Ohio
00:32:43 Jessica Edrington: PrBL was used instead of PBL by the math
department when I taught in a New Tech School (problem-based instead of
project-based)
00:32:47 Laura Semian: I LOVE the PBL idea for math... but... it's hard
with some of it... the old "unless you're going to be an engineer..."
00:32:51 Grace Man: Yes @Andre
00:33:33 Jeanetta Glass: @Michelle Zaretta's book or Dreamkeepers?
00:33:37 Laura Semian: football and parabolas ;)
00:33:39 Barbara LaPenta: I love PBL as a form of discovery
00:33:41 Mark Vasicek: Illustrative Mathematics is a great source for PBL
lessons.

00:33:42 Eric Totheroh: Designing a community center for their specific community

00:33:45 Allison Felton: catapults

00:33:45 Bruce Graham: It's a great way for students to explore mathematical concepts and make connections!

00:33:46 Jaime Krause: I agree Laura. What bogs me down are standardized tests. But I love using PBL

00:33:51 Christina Tully: Personal finance - home buying, credit cards and financial future, etc.

00:33:51 Michael Chrzan: Reducing the Racial Wealth Gap (for exponential functions)

00:33:52 Laura Berdine: Income inequality

00:33:53 Samantha Kabe: zipline barbie

00:33:56 dana dulzo: cross curricular units with math and science, math and social studies

00:33:57 Janice Magauay: PBL allows collaboration

00:33:57 Ming Ho: Pool testing for COVID-19 and probability

00:33:59 W Tad Johnston: large problems - not just a context

00:34:00 catherine abbott: Every Graph Tells a Storytell a story with graphs

00:34:00 Cheryl Gipson: PBL to problem solve improvements around campus

00:34:01 Veronica Kwok: I had students work on reorganizing/redesigning my classroom

00:34:01 Amy Baniewicz: Answers the question "when do I use this in real life?"

00:34:02 Sheila Kirton-Robbins: innovative

00:34:02 Portia Felder: authentic need and use of math

00:34:03 Sharon Black: building capacity with the students

00:34:03 Rolando II Delos Reyes: connecting math with society

00:34:04 Shannon Hammond: Building binomial cubes to connect the abstract to concrete

00:34:04 Jaime Krause: I differentiate between Project and problem-based learning/assessments

00:34:06 cynthia dsouza: inter disciplinary projects

00:34:08 Danielle Leger: I like projects because the students can express their own ideas, not mine

00:34:09 Jessica Edrington: Creating a recipe and determine max profit given constraints for linear programming

00:34:09 Aya Zvaigzne: how to grow the maximum amount of food in a garden

00:34:10 Linda Koval: Be invested in their own learning.

00:34:13 Catherine Bronikowski: redevelopment/redesign of green campus

00:34:14 Jaime Krause: Connecting math with personal lives

00:34:15 NEIL ANGELO FULLENTE: good morning! watching from Sorsogon city, Philippines

00:34:16 Steven Jarowski: Maximize student physical access given current school area

00:34:16 Lara Staker: Geometry—we do geometry in construction and build tiny homes. Great for basic trig. Collaborative team effort.

00:34:17 Cody Wilson: Show the importance of the dreaded WORD PROBLEMS and their real world application.

00:34:18 Patti Gawronski: football and Pythagorean theorem
00:34:18 Nancy Turner: I struggle to present real world problems at an appropriate mathematical level
00:34:25 catherine abbott: Drawing pictures using many functions and boundary conditions
00:34:27 Jaime Krause: Allows students to explore new venues
00:34:30 W Tad Johnston: learn while you do the project rather than practicing/applying
00:34:37 Sharon Valentine: Students build bridges in geometry
00:34:37 Laura Semian: COVID has been great with exponential functions... however, gets a bit political
00:34:39 RATI JONEJA: PBL SELF PACED LEARNING
00:34:45 Grace Man: Analyzing data to raise critical consciousness
00:35:00 Lisa Cady: investigating satellites and a few specific buildings that form parabolas
00:35:18 Mark Phipps: What was the PBL site he mentioned
00:35:26 Barbara LaPenta: pblworks.org
00:35:27 Veronica Kwok: pblworks.org I think
00:35:31 Laura Semian: love the interdisciplinary stuff!!!
00:35:31 Kevin Davis: PBL Works
00:35:31 Mark Phipps: Thx
00:35:39 Tom Cochrane: More curriculum to build
00:36:07 ALEX QUYENVO: could anyone share a place for PBL projects out there that we can take a look and use to apply when we can for our kid please. thanks !
00:36:10 Dawser Al-Adhami: I loved the Geometry with Islamic Earth Project
00:36:15 Jessica Edrington: @Nancy Turner - you can give them a black-box help for some problems depending on level. I had a homerun problem where students chose an angle and initial velocity, and I had a google spreadsheet that they plugged it into where I had the sine/cosine formulas used to create the quadratic functions
00:36:19 Dawser Al-Adhami: You can do it with Church
00:36:23 catherine abbott: My school system requires 3 "real" grades per week. How do I make bean counters happy AND do Experiential/PBL?
00:36:48 Jaime Krause: Catherine—have check-ins
00:36:50 Michael Chrzan: Checks for Understanding
00:36:59 Jessica Edrington: @Catherine Scaffold with exercises
00:37:00 Michael Chrzan: Exit Tickets
00:37:01 Jennifer Henderson: learning is active! Practice is not active, we need to let our students experience the math in action.
00:37:03 W Tad Johnston: Math was developed through experiential learning
00:37:04 Natasha Gambarov: Experimenting with interdisciplinary techniques (applying math to and from other content areas) from teachers AND students
00:37:05 Eric Totheroh: One way to think about it is the skills you want them to apply in the project as well - can you check to see that they have mastery of the specific skills?
00:37:07 Babajune Banihashemrad: Vector resultant pick 10 diff country name the mathematician there ,plus answer some other QS ...COVID QS....rate of growth in

their....

00:37:09 Jaime Krause: They are required to have X done by Friday. IYou can do like 0, 2, 4 scale

00:37:13 Sheila Kirton-Robbins: learning by doing

00:37:13 Laura Semian: exp learning = relevant and useful

00:37:16 Mary France Imperial: hands on learning

00:37:17 Rommel Daz: Learning that explore life

00:37:20 Shannon Hammond: Interdisciplinary units cotaught

00:37:20 Bruce Graham: Dan Meyer 3 act tasks?

00:37:20 dana dulzo: giving back to the community-place based learning

00:37:21 Janice Magauay: Students discovering and affirming the solution to a certain problem

00:37:21 Gordon Minton: student demos stuff?

00:37:22 Jessica Jeffers: Student lead

00:37:23 Danielle Leger: i have a grocery store project that focuses on unit rates

00:37:26 Portia Felder: like :agency not compliance

00:37:28 MICHAEL KAROLEWICZ: explore first, formal later

00:37:30 Jessica Edrington: Know if you do ALL PBL you are going to have to cut content to make time for it!

00:37:33 Rolando II Delos Reyes: How to deal with math in the real world

00:37:36 cynthia dsouza: maybe not being so focused on immediate applicability

00:37:38 Linda Pritchett: explorations

00:37:39 Maria Found: Discovery by learning and engagement in a topic the students select

00:37:43 Linda Koval: I have not done a PBL yet.

00:37:46 Jim Buckley: doing, whatever else is there, the students must DO something

00:37:46 Jaime Krause: You can also have them reflect as they go

00:37:48 Shashidhar Belbase: Connection of personal to social/cultural....

00:37:49 Alma Miho: Reflecting on their own Learning

00:37:52 Patti Wallace: discoery learning

00:37:52 Lisa Bailey: investigations

00:37:58 Maria Found: Reflection is KEY!

00:37:58 Art Scrivener: As also the Physics teacher, I have real world applications and experiences.

00:38:01 Julia Messner: Rice and volume activity

00:38:02 Lyubov Presnetsova: Learning from mistakes

00:38:13 catherine abbott: Source visuals for 3-Act-Math problem of short projects to build capacity is 101qs.com

00:38:18 Michelle Little: Hi, Michelle Little, Nashville, TN.

00:38:34 Dr Deborah Smith: Hey, Michelle Little

00:38:43 Patricia Posey: I had a group redesign the lunch room and make a presentation to the school board to finance it.

00:38:47 Laura Semian: basic, yes... but one of the easiest? tear corners off a triangle and see that they will make a line when lined up... 180 degrees!

00:39:15 Jennifer Gailey: I have used linear regression to help students determine what product combinations will maximize a business's profits.

00:39:20 Rebecca Zlotnik: Has anyone ever taught the IMP curriculum?
00:39:45 Jaime Krause: Rebecca, one of my college professors hates IMP. Doing EVERYTHING as PBL stunts their mathematical understanding
00:39:46 catherine abbott: PBLWorks says "project-based learning is the main meal, not the dessert">
00:39:47 Linda Koval: No, but what does IMP stand for?
00:39:49 beth blumberg: I taught IMP years ago
00:39:50 Laura Semian: DEFINITELY... projects during remote learning
00:39:53 Alma Miho: Yes in Chicago 14 years ago
00:40:05 Rebecca Zlotnik: Interactive MAThematics Program
00:40:18 beth blumberg: Interactive Math Program
00:40:21 Jessica Edrington: We plan to go to projects for elearning between Thanksgiving and Christmas.
00:40:26 Linda Koval: Thanks, Rebecca. I will look into it.
00:40:27 Andre ChenFeng: I'm wondering about how to make sense of the intersection between Culturally Responsive (anti-racist), PBL (real world), and Experiential Learning (immersive, learning by doing) in a context where white supremacy is not acknowledged in our math spaces (from teacher educators, preservice, inservice teachers, and even students)
00:40:30 Laura Semian: choice is GREAT for buyin
00:40:39 Rebecca Zlotnik: I loved it. Not very compliant with common core - but very student driven, group driven, interdisciplinary
00:40:43 Barbara LaPenta: Choice! Yes!
00:41:21 Laura Semian: interest is everything
00:41:32 Julia Messner: Researching a famous mathematician. This helps students see that mathematicians can come from a variety of cultures and backgrounds.
00:41:53 beth blumberg: IMP is a spiral program, to get to real learning and mastery students need to do enough of the spiral
00:42:14 Jessica Edrington: @Julia Messner - that's great, but what about classes where you have a lot of content, like precalculus and calculus?
00:42:43 Rebecca Kleinbart: I'm kind of surprised that student story is Phase Two? It doesn't come earlier?
00:42:51 Janice Magauay: Phase one
00:42:57 Jeanetta Glass: zero
00:42:58 Grace Man: @Julia I agree, most of my students have gap and lots of content to complete
00:43:00 Barbara LaPenta: I would say I have most of this pyramid, but phase 2.
00:43:02 Geoffrey Enriquez: Zaretta Hammond's book also talks about how culturally responsive learning works with the brain: games/storytelling/feeling safe are a part of CRT
00:43:03 Rachell Scott: phase one
00:43:04 Ana Guerrero: Student choice (phase 1)
00:43:04 Jenny Sagrillo: phase one or two
00:43:05 Shannon Hammond: @Andre- I am very interested in this too. I am looking into trying to use the Bootstrap Data Science curriculum to help students find and use data to understand and influence community.
00:43:07 Dave Hankin: Probably phase 1.
00:43:07 Barbara LaPenta: I would love to do more with phase

00:43:07 Maria Padiernos: 0.5

00:43:08 Sharon Valentine: Phase 1

00:43:08 Keisha Davis: 2

00:43:11 Rebecca Kleinbart: I would think Student Stories might be necessary for a classroom community

00:43:12 Lauren Bursh: Phase one

00:43:12 Mary France Imperial: phase 1

00:43:12 Cheryl Gipson: Phase 3

00:43:14 Arnold John Bulanadi: Phase 1

00:43:15 Emerlina Binuya: Phase 2

00:43:16 Candice Smith: @Julia Messner - I had a Mathematician Research Project (extra credit for my inclusion classes and required for my honors class)

00:43:16 Dr. Yankey: 2

00:43:21 Mark Phipps: I fear I may be walking up to the pyramid

00:43:24 Corvina Boyd: Phase 1, for sure

00:43:28 Laura Semian: LOVE you have a "Phase Zero" lol

00:43:46 Julia Messner: Thanks Candice! Nice idea for extra credit!

00:43:48 Tom Cochrane: This early in my career, I will probably come up on certain topics that are a better fit for this now

00:43:49 Melonie Smith: I'm between Phase 1 and Phase 2

00:43:52 Jessica Jeffers: I love the phase zero too.

00:43:53 Geoffrey Enriquez: Phase Zero is a lot of worthwhile work. Knowledge of students is key

00:44:03 Nick DiGrispino: Me too, Mr. Phipps!

00:44:04 Laura Semian: Yes... teacher names into word problems students LOVE

00:44:05 beth blumberg: I coach math team.. with students from a lot of schools... It is hard to get everyone into a safe space

00:44:08 catherine abbott: I think the Phases reflect who has control. Phase 0 fully teacher Phase 1 Teacher control but students have choice Phase 2 Students share themselves in Teachers frame Phase 4 Students create the frame and the contents

00:44:08 Grace Man: Being unbiased

00:44:09 W Tad Johnston: powerful!

00:44:10 Veronica Kwok: I love these questions

00:44:16 Gina Velasco: great

00:44:34 Andre ChenFeng: Meta Phase zero - name your teacher positionality (identity & power) decenter normative math beliefs

00:44:35 Viragni Chand: phase 1

00:44:35 amandadodd: Love this!

00:44:35 Denise Walston: listening and talking with students not only about the content but about their class community

00:44:43 Jessica Jeffers: These questions would be powerful in a PLC for reflection

00:44:46 Melissa Luzano: Ask them! Have them give you anonymous feedback

00:45:04 Dave Hankin: Strive for acceptance of all mathematical thoughts by all students.

00:45:06 catherine abbott: video frozen here anyone else/

00:45:14 Howie Hua: It's working for me

00:45:17 Jessica Jeffers: Video works for me

00:45:17 Jaime Krause: You can't tell at first, but as time goes on, you can. Do any students open up to you? Do most students disrespect you? Do students become more comfortable with taking random risks, even it's just raising their hand or leading a group?

00:45:17 Dave Hankin: choppy

00:45:28 Jessica Jeffers: mine isn't choppy

00:45:50 Dave Hankin: For some of us it is...

00:45:56 Nancy Turner: how can we build community with online instruction?

00:46:07 Andre ChenFeng: If you're interested in talking more about moving from being math educators for equity, to becoming anti-racist math educators, I'm happy to collaborate and connect more. Gotta hop onto another call.
<andre.chenfeng@cgu.edu>

00:46:18 Laura Semian: Retired? envy him! ;)

00:46:23 amandadodd: Yes, have normal conversations to build relationships. To just content all the time.

00:46:36 Laura Semian: happy bd!

00:46:43 Babajune Banihashemrad: PLTW

00:46:51 Sharon Valentine: Questioning how to achieve this close relationship with CV and social distancing?

00:47:00 Denise Walston: students have to trust you too in creating that safe space. congruence between your actions and words

00:47:03 Rebecca Zlotnik: Totally agree - having kids gave me a lot more patience.

00:47:12 Laura Semian: "voice and choice" I like it... never heard that

00:47:16 Galaxy J2 Core: Use constructivist approach and be fair to every student.

00:47:21 Melanie Dickson: Phase 1: Maybe providing open-ended math tasks where students can choose to work with numbers that they are comfortable with.

00:47:37 Laura Semian: yes... buy in is everything...

00:48:52 Laura Semian: integrating art and writing is good, too... esp for the students who are NOT into it

00:49:24 catherine abbott: The US Census Bureau and American Community Survey have LOTS of great statistics to create projects around.

00:49:34 Melanie Dickson: I remember in Grade 12 Statistics we got to choose to explore statistics that were relevant to us and our future

00:50:21 catherine abbott: U.S. Census also has great lesson plans for Social Studies and Math at "Statistics for Schools"

00:50:34 Maria Found: Options on how they choose to be assessed.

00:50:36 Michael Chrzan: We're gonna co-write the syllabus together next year.

00:50:37 Danielle Leger: how and when to be assessed

00:50:38 Lyubov Presnetsova: Writing in Math

00:50:39 Rolando II Delos Reyes: Provide options of activities to do

00:50:43 Laura Semian: be strategic with it... use tic tac toe choice... they HAVE to do a "hard" one...

00:50:50 amandadodd: I do that every year.

00:50:51 Dave Hankin: Class norms

00:50:53 Janice Magauay: Choices on how to demonstrate their understanding

00:50:55 Patricia Posey: I plan to have my students choose the assignment they wish to complete

00:51:01 Howie Hua: It's me! :D
00:51:03 W Tad Johnston: write the chapter o parallelograms rather than do it
00:51:03 Denise Walston: choice in project topics
00:51:07 beth blumberg: Even for a group focused on Math Competitions... I ask about what topics they want to work on... I also have them prep the topics...
00:51:08 Rebecca Zlotnik: When my kids were little, I would pick two outfits and let them choose which one to wear that day. There are many basic assignmnets that you can do that with in school.
00:51:08 Linda Koval: Most of my students would rather do worksheet than to do a project.
00:51:13 Cheryl Gipson: Projects with open criteria
00:51:20 catherine abbott: I love to have my kids design the statistics questions
00:51:29 Jaime Krause: Basic, but giving choices on regular assessments. One of the things I sometimes do is give different "levels" for problems. The base is a 4, and there are 3 choices where one is worth 4.5 points on a 4-point problem and 5 points on that same 4-point problem. More students try the difficult ones as time progresses, and they feel like they really earn their grade more.
00:51:37 catherine abbott: EVERY GRAPH IS A STORY!
00:51:37 Dr. Yankey: cross- Curriculum units
00:51:40 Laura Semian: The Math Curse is a fun read... well, for "math people" ;))
00:52:04 Art Scrivener: From the book "Burn Math Class" is teach Einstein's proof of time dilation using the Pythagorean theorem
00:52:08 Laura Semian: I agree w/ "every graph is a story"
00:52:15 catherine abbott: MATH CURSE is Great! Video the "Story of 1" by Terry Jones is great too.
00:52:19 Jessica Edrington: I so what to get a game of Charty Party before doing my next unit on graphs!
00:53:10 Laura Semian: Marilyn Burns "The I Hate Math Book" is fun
00:53:38 Linda Koval: That they are poor math students.
00:53:41 Laura Semian: Stories? I hate math...
00:53:48 Laura Semian: awww...
00:53:50 Laura Semian: hugs
00:53:56 Dawser Al-Adhami: When they graph a slope as a story
00:53:59 Michela Shalvoy: Similar to a math autobiography, I saw a recent video inviting students to discuss how math is involved in their favorite hobbies
00:54:03 Beth Kobett: We understand!
00:54:05 Nick DiGrispino: Math is too hard
00:54:05 Rolando II Delos Reyes: Sadly they only know word problems from unknown people
00:54:06 Ming Ho: Story of how mathematics help solve human problems.
00:54:07 Geoffrey Enriquez: personal finance is an area where students (high schoolers) and myself share stories in mathematics
00:54:07 Danielle Leger: they talk about sports stats
00:54:08 Dr Deborah Smith: How they struggle In math
00:54:13 Dr. Yankey: now I can do more
00:54:19 Rolando II Delos Reyes: COVID-19 prediction
00:54:24 Nancy Turner: Students rarely consider where is the math unless

prompted frequently. Then, they can start to "own" this question in their own lives

00:54:31 Art Scrivener: Saddest story: Parallel lines. So close but never meet.

00:54:34 Crystal Moyer: One of my fave was a colleague who had students make 'who are mathematicians' posters. My favorite was just a mirror.

00:54:37 Candice Smith: I have agriculture technology students who talk about using math in building projects, and I would love to incorporate that into my lessons, but it is hard as a new teacher.

00:54:39 Laura Semian: math of democracy w/ the census... so cool

00:54:42 Rebecca Zlotnik: Anyone have or use "Charty Party?" Was thinking of buying it...

00:54:47 Portia Felder: students researching a self-created question and survey a sample of the population in order to answer it is a great project

00:54:55 MICHAEL KAROLEWICZ: the story from parents of how they were not good in math

00:54:56 dana dulzo: student council survey results and stats

00:55:17 Jessica Edrington: Shading linear inequalities - use a test point, if it gives you a false statement it's a LIAR, run away! Like you should for a lying boyfriend/girlfriend.

00:55:34 amandadodd: We are offering Financial Algebra for the first time next year.

00:55:35 catherine abbott: One project Students create a 1-page story that presents a problem that can be solved with a graph with 2 (or more) linear inequalities.

00:55:57 Deborah Gordon: Our history department does something like that called "Project Citizen" - I'd love to collaborate with the history teacher on this

00:55:59 Laura Semian: geo scrapbooks work really well... choose a theme and find examples... kids go nuts with it... Minecraft? skateboard? surfing?

00:56:09 Julia Messner: What are some good books for high school seniors?

00:56:19 catherine abbott: Another project wrote questions where two sets of data were compared to answer the questions.

00:56:22 Dr Deborah Smith: Project citizen is awesome

00:57:17 Laura Semian: Innumeracy by John Paulos is good for HS

00:57:43 Laura Semian: As long as the students get the right answer and can show their work? GO WITH IT!!!

00:57:51 Kevin Davis: Limitless by Jo Boaler for seniors

00:57:51 catherine abbott: Books " The Number Devil" by Hans Magnus

00:58:02 Laura Berdine: Had my students read excerpts from Mathematics for Human Flourishing by Francis Su.

00:58:13 Deborah Gordon: @dr. Deborah - yes, I just texted the history teacher that we need to collaborate to put more math into the projects :)

00:58:14 catherine abbott: Manga "Math Girls" series by Hiroshi Yuki

00:58:17 Dr Deborah Smith: @Deborah G. I've used Project Citizen during my stat unit.

00:58:20 Catherine Bronikowski: Evicted - Poverty and Profit in the American City

00:58:21 Laura Semian: I agree... there's more than one way to skin a cat...

00:58:21 Kate Butler: It helps when students' work goes somewhere other than the teacher's desk. Share it somehow. Create posters and hang them in the

hallway.

00:58:39 Dr. Yankey: I agree

00:59:01 catherine abbott: Yes. Yes. Yes. To make PBL "real" is to have a "real" client. Not just the teacher.

00:59:26 catherine abbott: Has anyone tried the USArmy's eCybermission?

00:59:32 Laura Semian: When you have ESOL students who have learned how to do math differently that we do here in the States but still show work and get the correct answer? We NEED to respect that... and, almost, applaud it...

00:59:50 Shannon Hammond: If we have strong enough classroom communities, we won't have to show them that their ways are equivalent to ours. It could be regular classroom discourse to compare methods, and there is no need to pick the teacher's method over an equivalent.

01:00:38 Art Scrivener: HS senior book: Zero: The Biography of a Dangerous Idea

01:00:46 Jennifer Henderson: @Laura, Yes! It is so interesting to see how different countries approach mathematics. Imagine the conversations you can have while you discuss the differences!

01:00:54 catherine abbott: GREAT BOOK "Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy" by Cathy O'Neil

01:02:07 catherine abbott: Weapons of Math Destruction is a scary book

01:02:22 Ethan Weker: Fun fiction book: "The Math Olympian", about a girl from Canada (Nova Scotia) who discovers a love of math as she goes through high school. Our math club read it (and went through each of the challenging problems!)

01:02:55 Jennifer Henderson: do math the way they like to do it, LOVE it!

01:03:03 Grace Man: Using data to illuminate the hyper-segregation in schools, lack of funding in Black schools compared to their White neighbors, the disproportionate amount of Black people murdered daily. These all are conversations that came up while teaching my high school students

01:03:06 beth blumberg: That works when what they have been taught/learned is consistent and correct... however, if a student misunderstood a previous teacher or learned something incorrectly... it can be really tricky to get them to buy into a new procedure. I worked in a system where a previous grade teacher had actually taught order of operations wrong to half the students in the grade! Really problematic

01:03:39 Laura Semian: Yep... that whole PEMDAS thing is a problem when the MD and AS are taught in TOTAL order... ugh

01:03:53 Jessica Edrington: @beth blumberg - I hate when that happens!!

01:04:08 Melissa Luzano: Amazing @Grace (ha, get it?)

01:04:34 Rebecca Keller: Thanks for the book/resource suggestions everyone. I am grabbing them all to check out!

01:04:41 Nicole Walden: melissa - lol\

01:04:51 Shannon Hammond: <https://ncase.me/polygons/> is a great interactive to help students quantify diversity in neighborhoods

01:05:02 Art Scrivener: Good leadership book on letting go "Turn the Ship Around" by David Marquet. Story of a nuclear submarine captain.

01:05:14 Jessica Jeffers: What is cool about the math and find a way for them to discover it

01:05:19 Laura Semian: this will probably NEVER be allowed again... but converting favorite family recipes and bringing in the product is fun

01:05:31 Lisa Cady: @Rebecca K - so am I! This is a great list! Thank you, everyone!

01:06:25 Trena Wilkerson: Also check out the series of Rules that Expire from NCTM –there was one in each of the archived journals. [www.nctm](http://www.nctm.org) and so a search for Rules that Expire.

01:06:32 Nancy Turner: I'm considering the mathematics of sound as a project with the Mariachi teacher

01:06:39 MICHAEL KAROLEWICZ: focus on the student

01:06:55 Eunjeong Ok: I'll incorporate a more culturally sensitive approach to learning.

01:06:58 Nancy Davis: Set a culture of student ownership from day one

01:07:16 Art Scrivener: Nancy Turner: Lots of math in sound and light. Talk to the physics teacher in you can.

01:07:24 Trena Wilkerson:
<https://www.nctm.org/Publications/Teaching-Children-Mathematics/Blog/13-Rules-That-Expire/>

01:07:25 Trena Wilkerson:
<https://www.nctm.org/Publications/Mathematics-Teaching-in-Middle-School/Blog/12-Math-Rules-That-Expire-in-the-Middle-Grades/>

01:07:29 Nell Thurlow: Student choice and and voice

01:07:32 Masooma Razzak: OMG - I just listed 7 PBL ideas and extensions I can incorporate in my IB Algebra class! Your talk was very inspirational!

01:07:33 Valerie Vanderport: to listen and encourage truth

01:07:37 Rolando II Delos Reyes: I will start letting go of control and allow a little bit of chaos

01:07:39 Melissa Luzano: I commit to addressing controversial issues and not taking the easy way out.

01:07:39 Linda Koval: Let students take the lead instead of just my lecturing.

01:07:44 Dana Burrows-Huckfeldt: flexible seating and an open door policy

01:07:46 Robin Koller: Using statistics from the community could be interesting

01:07:47 Jessica Jeffers: I'm excited to use these questions to prompt reflection and dialogue with the teachers I work with. Brainstorm ideas together

01:07:50 Laura Semian: All students can learn and all students deserve to feel loved... even if it's only for one year

01:07:54 Natasha Gambarov: let my future students teach me

01:07:57 dana dulzo: rose and thorn circles to check in with students

01:08:01 Candice Smith: Offer more choices for my students with their assignments

01:08:03 Trena Wilkerson:
<https://www.nctm.org/Publications/Mathematics-Teacher/2017/Vol111/Issue2/Circumventing-High-School-Rules-That-Expire/>

01:08:04 Jennifer Gailey: Open-ended projects

01:08:13 Patricia Posey: I want my students to know that all of their ideas are welcome in my classroom.

01:08:14 Art Scrivener: I tell them to “Dare to be stupid.”

01:08:19 Jim Buckley: Have an actual conversation with each student on a regular basis

01:08:21 Babajune Banihashemrad: I promise staying silent is not an option

01:08:22 Jodi Donald: I commit to adapt number talks for my 11th and 12th graders

01:08:22 Ethan Weker: I will ask my students - what is something in your community or in the world that you want to learn more about? What is something that you want to change? Then I'll help them answer the question: how can we use math to explore that?

01:08:22 Christina Tully: I want to engage more of my students by trying to have conversations with more of them - especially the quiet ones!

01:08:23 Dana Burrows-Huckfeldt: recipes not projects

01:08:30 Cynthia Luna-Dulgov: Incorporating social justice into the classroom no matter how much math or little math is involved

01:08:38 RATI JONEJA: Experiential learning with sense of SDG

01:08:44 Denise Walston: seeing my students- listening more; and never allowing one of my students to take the easy way out

01:08:46 Nick DiGrispino: As Joe Maddon says, "Embrace the Suck

01:08:47 Donna Misciagna: Provide different ways for students to access the learning.

01:08:58 Lorie Huff: Thank you Bree and Kevin. Great information

01:08:59 Jessica Edrington: @Nick DiGrispino - go Cubs!

01:09:04 Gordon Minton: do you sprinkle projects in or is it all projects all the time? suggestions of project ideas books?

01:09:14 Janice Magauay: Using Math to engage students with real-world responses to timely and relevant issues

01:09:18 Karoulin Aljoris: what SDG????

01:09:19 amandadodd: Thank you all

01:09:19 Shannon Hammond: If I make a mistake in my math, the first student to respectfully point it out gets "a point". It helps us to accept that everyone makes mistakes and everyone can help to fix them.

01:09:23 catherine abbott: @Nick...was that Joe Maddon? I thought it was my brother's motto.

01:09:25 Viragni Chand: @ panelists Thanks for the great presentation and everyone thanks for sharing your ideas and the list of readings.

01:09:26 Portia Felder: @Art ??

01:09:26 Karoulin Aljoris: thank you

01:09:29 Linda Pritchett: equity and access for all learners

01:09:39 Ratu Ilma Indra Putri: Thank you

01:09:40 Jessica Edrington: When I did PrBL full time, I would mix small mini-problems in-between the bigger project-type problems.

01:09:54 Lisa Cady: @Ethan W. - I like that! I am totally stealing that idea.

01:10:00 Anh Le: Dare to explore and to make mistakes in the learning process.

01:10:06 Rachell Scott: Create an environment so that students can be empowered to have a voice and have choice.

01:10:11 Myrna Cabrerros: thank you

01:10:11 dana dulzo: thank you for some thought provoking adaptations to make

01:10:13 Nick DiGrispino: You know it, Jessica. LOL Catherine!

01:10:21 Galaxy J2 Core: Thank you. Together we can solve what ever problems we have. Great presentation.

01:10:21 Susan Troutman: Thanks - It is obvious that both of you spent a lot of time planning this presentation.

01:10:21 beth blumberg: Some Math competitions actually work well for collaboration. They are set up for team work... and too much work for one student.. also the problems on good contest are actually differentiated

01:10:37 Nancy Davis: Thank you!

01:10:38 Linda Pritchett: Thank you!

01:10:39 Trena Wilkerson: Thank you Bredeen and Kevin for such thoughtful session and opportunity to reflect and set goals!

01:10:54 Sheila Kirton-Robbins: Thank you.

01:11:04 Laura McGuigan: Thank you!

01:11:04 Jet Yeung: My ownership to make norm changes to making so that they have freedom to speak their mind on how they will collaboration in the classroom in zoom.

01:11:05 Trena Wilkerson: Right @Theresa! what about Pk-12!!! :-)

01:11:08 Alma Miho: Thank you

01:11:11 Jaime Krause: I love the idea of setting up guidelines, especially remotely. Very helpful!

01:11:16 RATI JONEJA: thank you for a reflective session

01:11:21 Jessica Jeffers: Thank you both this was insightful and inspiring

01:11:27 Bishnu Khanal: Thank you!

01:11:34 Jet Yeung: thank you for your skills and information.,

01:12:01 Nell Thurlow: Thank you for the excellent presentation

01:12:08 Rachael Williams: Thank you so much for this very relevant webinar.

01:12:08 Art Scrivener: NBA site has lots of statistics that students can access.

01:12:15 Sharon Black: Thank you so much for this webinar....very thoughtful, inspiring and relevant.

01:12:24 Karen Aspenson: Thank you

01:12:24 Janice Magauay: Thank you for this webinar.

01:12:27 ANAIRIS DE LA CRUZ BENITO: Thanks!

01:12:29 Nick DiGrispino: Thank you for the thought provoking insight.

01:12:32 Julia Messner: Thank you!

01:12:46 Rebecca Keller: Thank you Bree and Kevin!

01:12:55 Rolando II Delos Reyes: This is a great idea to include in our classrooms! Very relevant specially with how Math os being used in predicting COVID cases.

<https://www.cnn.ph/news/2020/6/30/Harry-Roque-Congratulations-Philippines-COVID-19-forecast.html> Thank you NCTM! PH

01:12:57 Daniel Irving: Thank you for this incredibly reflective presentation!

01:13:03 Kathy Medrick: Thanks -- great job on presentation.

01:13:11 ALEX QUYENVO: thank you !

01:13:13 Allison Denisco: I have that book and its amazing!

01:13:17 Eunjeong Ok: Thank you so much!

01:13:24 Laura Semian: Please post the name of the article and link?

01:13:26 LeAnna Deveaux-Miller: Thank you..great presentation

01:13:28 Rachell Scott: Thank you!

01:13:37 Linda Koval: Thank you.

01:13:42 Sharon Valentine: Thanks to all for sharing your thoughts and

experiences!

01:13:44 Patricia Daugherty: Thank you all very much. Some of the best learning my students and I had during Distance Learning were our Conversations and some of the rabbit holes we went down.

01:13:58 Alessandra King: thank you!

01:14:02 Michelle Little: Thank you!

01:14:33 Linda Koval: Yes!

01:14:33 FLORENCE MAE DELA CRUZ: Thank you!

01:14:44 India Puch: Thank you!

01:14:46 Geoffrey Enriquez: thank you for saying that one doesn't have to do PBL everyday

01:14:58 catherine abbott: One year I gave a "student project committee" the standards I needed the project to hit and they created the rubric for that project.

01:15:00 Lisa Cady: Thank you.

01:15:03 Wilma Besin: thankyou

01:15:28 Dr. Yankey: Thank you very much

01:15:29 Mary France Imperial: Thank you so much, another wonderful session.

01:15:33 WARASABON DOMINIKUS: Thank you for all panelists, Bree and Kevin

01:15:36 Laura Semian: This has been WONDERFUL! Love the concept of PBL and all of the ideas shared...

01:15:49 Rommel Daz: Great session, thank you.. salamat

01:15:56 Anh Le: Thank you for another amazing session!!!!!!

01:16:00 Erica Heinzman: Thank you! Enriching presentation!

01:16:00 Gina Velasco: thank you for another wonderful session

01:16:46 Elba Howington: Thank you, love PBL, enjoy the rest of the evening.

01:16:52 Eunice Dimasangal: Thank you! 😊

01:17:00 LaDonna Allison: Thank you for this wonderful information

01:17:14 Dave Hankin: Plexiglass.... I haven't heard that.

01:17:25 Dave Hankin: We all need to wear masks!!

01:17:27 Olga Kosheleva: Thank you!

01:17:29 Shannon Hammond: Same struggle

01:17:36 Beth Kobett: High School Mathematics Lessons to explore, understand, and respond to social injustice. Found on @nctm

01:17:50 beth blumberg: shared white board... one talks and one writes

01:18:02 MICHAEL KAROLEWICZ: Wishing you all success this fall!

01:18:13 Janice Magauay: How about Shared google slides where you can see individual contributions?

01:18:14 catherine abbott: I can only imagine trying to talk to a whole class through a mask. (sigh...living in interesting times)

01:18:48 Nancy Turner: A face shield might be a better option, supposedly works better than a mask

01:18:50 Dave Hankin: I've done it...the mask isn't that bad. Again, I'd rather be safe and healthy.

01:19:10 Dave Hankin: I like the shield option...

01:19:11 Jodi Donald: I bet our students might be able to come up with creative solutions (Secondary aged, that is)

01:19:12 Bruce Graham: Thank you Bree and Kevin! This session has been fantastic!

01:19:27 Dana Burrows-Huckfeldt: thanks
01:19:34 Cecilia Lopez: Thank you
01:19:46 Arnold John Bulanadi: Thank you!!!!
01:19:47 Viragni Chand: Thank you Bree and Kevin, very inspiring
01:19:50 Melissa Luzano: @Nancy - thinking the same about face shields, also
doesn't hide expressions
01:19:59 Allison Denisco: Calculus - Use calcmedic
01:20:06 Gretchen Mae Empuesto: Thank you so much
01:20:06 Allison Denisco: Statistics - Use Statsmedic
01:20:08 Rosalyn Bantay: Thank you
01:20:10 Beth Nalker: Thank you Bree and Kevin! And thanks to NCTM for
sharing their presentation with us!
01:20:12 Dave Hankin: Good for students to see our faces, if possible.
01:20:18 catherine abbott: Park-based learning
<https://www.festeredu.com/parkbasedlearning>
01:20:21 Justin Klinger: Thank you.
01:20:26 Laura Berdine: Calculus project: Gini Index (area between curves)
01:20:26 Dawser Al-Adhami: Thank you So much
01:20:28 Kenny Mullins: Thank you guys! This was very helpful.
01:20:32 Ana Guerrero: Thank you for the information
01:20:32 Jamie Herd-Tesson: yes please! I teach Calculus
01:20:36 Sharon Black: face shields work well with anyone with a hearing
deficit
01:20:38 Jodi Donald: Calculus! Go to YouCubed. They have a Calculus
section with links to a project based Calc class at Rockhurst University in Missouri
01:20:41 Cody Wilson: Hi Jamie!
01:20:42 Laura Berdine: Calculus
01:20:51 Nancy Turner: Thank you for the presentation
01:20:53 Anh Le: Perhaps add a small personal mic to clip on your shirt to
help students heard your voice better while talking under the mask?
01:21:02 Laura Semian: Yes... the history of math really can hook some kids
01:21:06 Candice Smith: I teach Math II and I struggle with finding
resources that are not just geometry and not just algebra 1 or 2.
01:21:12 Laura Berdine: Calculus: also had students design their own Dan
Meyer 3 act lesson as a final project
01:21:16 catherine abbott: Calculus...investigate why we need calculus?
01:21:18 Genesis Docena: thank you great presentation!
01:21:22 Karin Leonard: Thank you all. Also, thanks for the closed
captions.
01:21:25 Dr Deborah Smith: Thank you for the presentation. I have
learned a lot and will use what I have learned.
01:21:26 Maria Found: Thank you Allison Denisco!
01:21:27 Michelle Webb: Thank you!
01:21:27 Keisha Davis: Thanks
01:21:32 Shashidhar Belbase: Thank you very much for such great
presentation !
01:21:36 RHONDA MAYO: Thanks!
01:21:38 Melissa Castillo: Thank you!!!!
01:21:39 Brittany Miller: Thanks!
01:21:39 Cal Armstrong: Great work, folks! Thanks!

01:21:40 Linda Koval: Thank you again!
01:21:40 Krishi Gupta: Thank you!
01:21:40 Ron Napper: Thank you.
01:21:40 Dongsheng Zhang: Thank you.
01:21:41 Danielle Grenader: Thank you!
01:21:41 Portia Felder: Awesome
01:21:41 Christina Lee: Thank you!
01:21:42 Janice Magauay: Thank you
01:21:42 Patricia Daugherty: I will order masks with clear space for
seeing the mouth. (For DHH students, but everyone)
01:21:43 Katherine LeDuc: Thank you!
01:21:43 Ethan Weker: Thanks Kevin and Bree!
01:21:44 Jennifer Winne: Thank you!
01:21:44 Michela Shalvoy: Thank you!
01:21:45 Carly Jardinier: Thank you!
01:21:45 Cody Wilson: Thank you very much!
01:21:45 India Puch: Great presentation
01:21:46 Dr. Yankey: Thank you very much
01:21:46 Eileen Phillips: Thank you!
01:21:46 Angelita Beltran: Thank you!!!
01:21:46 Marianne Mammon: Thank you!
01:21:46 Wenny Liao: Thank you!
01:21:47 Rebecca Zlotnik: Thanks so much!
01:21:47 Valerie Vanderport: thank you
01:21:48 Gail Saltveit: thank you! Inspirational!
01:21:49 Candice Smith: THANK YOU!!
01:21:49 Patricia Posey: Thanks, this was great!
01:21:49 Patrick Montague: Thank You
01:21:49 Rita Shamrock: Thank you
01:21:50 Maria Padiernos: Thank you!
01:21:50 Sharon Black: Thank you, thank you, thank you!!
01:21:50 Stephanie Thomas: Thank you so much!
01:21:51 Pallavi Narain: Thank you!
01:21:52 Jim Buckley: great job
01:21:54 beth blumberg: Thank you
01:21:54 Linda Ng: T-H-A-N-K Y-O-U!!!!!!!!!!
01:21:54 Rolando II Delos Reyes: Thank you and warm regards to your kids!
01:21:55 Shannon Hammond: Thank you
01:21:55 Laura Semian: THANK YOU! Beth, Bree, and Kevin... all the best to
you and yours. Be well~
01:21:56 Lyubov Presnetsova: Thank you a lot
01:21:56 Rachell Scott: Thank you!
01:21:57 Rene Stratton: thank you!
01:21:58 Cheryl Gipson: thanks
01:21:59 Melonie Smith: This was a great presentation! Thank you for
sharing!
01:22:01 Corvina Boyd: Thank you for all of the information. it was quite a
bit but very helpful,
01:22:02 Sheila Bishop: Thank you very much!
01:22:04 Babajune Banihashemrad: THANK YOU

01:22:06 catherine abbott: @Laura ...great idea about students
designing their own 3-act math

01:22:09 Mohamed Jamaludeen Thirapusa Mohaideen: Great Minds.. Great
thoughts. Thanks so much!

01:22:09 Danielle Leger: thank you so much!!! wonderful ideas!!!

01:22:10 Aya Zvaigzne: Thank you very much for an excellent webinar!

01:22:14 catherine abbott: Thanks folks.

01:22:15 Linda Adams: Thank you

01:22:19 Rene McNeal: Thanks so much!

01:22:20 Maria Found: Yes Jodi Donald... I found YouCubed by Boaler recently
and will be checking it out!

01:22:28 Pascal Despeignes: Thank you for the presentation I would love
to have some calculus resources. Thank you

01:22:30 Dave Hankin: Thank you again from Globe, Arizona!

01:22:31 RATI JONEJA: thanks to NCTM AND PANELISTS

01:22:37 Jorge Veloso: Thank you. Bye bye.

01:22:38 Laura Semian: the NCTM illuminations lessons are GREAT

01:22:55 Nancy Davis: Thank you so much!

01:23:06 Jodi Donald: The YouCubed link to the PBL Calc---the resources
from Rockhurst are completely free!

01:23:07 Francis Kisner: Thank you. Much to consider.

01:23:08 Andy Mitchell: Thank Bree and Kevin. Great job!

01:23:11 Christina Tully: Thank you!!

01:23:27 Nuria Linares: THANK YOU so very much!!!!

01:23:28 Katherine Gleason: This was great! Thank you!!

01:23:29 Ratna Isnayunita: thank you very much

01:23:31 ALEX QUYENVO: thank to all of you guys !

01:23:33 Dave Hankin: Thank you NCTM!!

01:23:35 India Puch: Thank you guys!!!

01:23:38 Laura Semian: Thank you behind the scenes crew!!!

01:23:38 Linda Ng: Thank you organizers!

01:23:41 Jennifer Gailey: Thank you!

01:23:42 Nell Thurlow: Thank you Chonda!

01:23:43 Linda Ng: Thank you!!!

01:23:44 Anh Le: Thank you everyone!!!!!!!

01:23:45 Lawanda Mahomes: Thank you guys!

01:23:54 Karen Aspenson: Thank you, everyone!

01:23:55 Samantha Kabe: Thank you! This was wonderful

01:24:01 Walter Shaner: Thank you very much!

01:24:02 FLORENCE MAE DELA CRUZ: NCTM, you the best! 💖

01:24:10 beth blumberg: Thank you for having the conference in this
format!!! It is a huge improvement over an overwhelming few days

01:24:12 Hannah Tully: Thank you so much!

01:24:19 Laura Semian: Thank you... be well, everyone!

01:24:23 Maria Found: THANK YOU TO NCTM and these dedicated PANELISTS! So
grateful!

01:24:24 Lauren Bursh: Thank you