

Dan Meyer (00:01):

Hey folks, welcome back to Math Teacher Lounge. My name is Dan Meyer.

Bethany Lockhart Johnson (00:05):

And I'm Bethany Lockhart Johnson.

Dan Meyer (00:06):

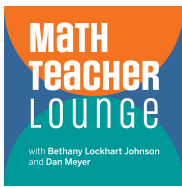
Bethany, it's been fantastic to see you. It's been a long while. I feel like [it's been] since NCTM and our last episode, where we compared the best teacher from movies and TV, crowning the winner Tina Faye from Mean Girls, is a huge, huge episode. It's good to see you back.

Bethany Lockhart Johnson (00:20):

Didn't see her coming, but it'd be so fun to be in person. And the energy in that room was, I mean, if you listeners, if you heard that episode, we had some very, very passionate opinions about which teacher was best represented. And we've heard from a lot of you that we left a ton of people out. We know, and you know, it's been great to hear your opinion and your defense of Ms. Frizzle. So, thank you for that. <laugh>

Dan Meyer (00:50):

I apologize for nothing. We're super excited right now to bring to you folks the first post-NCTM episode. We have a couple of authors, a couple of published authors on the call here. And they, they got a really fun premise for a book. They have, I think, maybe one of the most interesting data sets out there. There's lots of data out there that's quantitative, you know, survey data or assessment data and who-knows-what percentages. And they've got a set of data that's just super qualitative, but really dives deep into the beating heart and soul of students as it relates to mathematics. Especially because this season is all about joy in math, how students have it, why they don't sometimes. And what we can do about that. First up, Sarah Strong is a co-author of the book Dear Math. Sarah loves hearing people's math stories. I've known Sarah first as a math and science teacher in grade six through 12, and a teacher developer at High Tech High in San Diego, a school that's very innovative and project based and very exciting. And so Sarah's on as a co-author. And Gigi



Math Teacher Lounge transcript
Season 4, Episode 4:
Dear Math

Butterfield is also a very talented mathematician. And, you know, someone that I have learned from. So I consider Gigi a math teacher-educator as well, coincidentally, [as] one of Sarah's students! So this is a fun project where Sarah and Gigi are teacher and student and co-authored a book called Dear Math. And Gigi's now a student, a screenwriting major at Loyola Marymount University. So please, welcome on, great to have you folks, Gigi and Sarah.

Bethany Lockhart Johnson (02:28):

Welcome, you two. We're so glad to have you in the Lounge.

Sarah Strong (02:32):

Yay. Thanks for having us.

Gigi Butterfield (02:34):

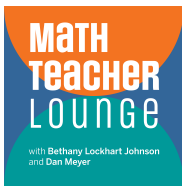
Yeah, happy to be here.

Bethany Lockhart Johnson (02:35):

So the full title [is] Dear Math: Why Kids Hate Math and What Teachers Can Do about It, and as I was reading this out and about in the wilds <laugh>, you know, it was really interesting. Like I'm sitting in a waiting room and somebody starts to talk about their math experience, which, you know, Dan, you know, I love to talk to people. Actually, this season, Sarah, Gigi, we are actually starting all of our episodes, and we actually had a whole episode about this, about Dan's math story, my math story. We're asking all of our guests to share their math story. As I was reading Dear Math, I also felt like I got to hear more about your math journey as well as bits and pieces of the students in your class from their 'Dear math' letters. It was really wonderful. And so I was like, oh, I wanna hear their math story. So would you share your math story with us, as little or as a lot as you would like to?

Sarah Strong (03:35):

Well, we should have Gigi go first because this book is all about centering student voices. And so I always feel like we need to start by listening to the students. And Gigi here is the student, so Gigi.

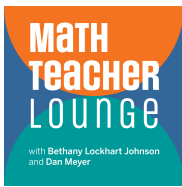


Gigi Butterfield (03:47):

Wow, thanks Sarah. I feel very centered <laugh>. Um, so <laugh> my math story as a young student, I quite 'liked math.' I put that in quotations that I liked math, and that was because I pretty much thought that I liked it because I was told that I was good at it. I could complete the math assignments that my teachers gave to me pretty easily and pretty hastily. And so that made me feel really good about myself. And then I'd get a big red A+ and that'd make me feel even better about myself. And so I was like, I love math. Math is awesome cuz I'm awesome at it. And this formed what, if you read the book, you'll see Sarah and I kind of coined a fraudulent fondness of mathematics in that, oh, 'I think that I like this thing because I don't really understand it that much, but I understand what I need to understand to gain validation from my teachers and peers.' And so that's kind of the attitude I was heading into middle school with. And it carried for the first couple years. And then in eighth grade I had a math test that I failed, like, four times in a row. And that was the first time I had really experienced failure within the math classroom. And it was super hard for me. And it ended up being, for a brief time, very detrimental to my relationship with math in that I was like, well, 'The reason I loved this is because I was good at it and I'm not good at it, so I hate it. So I hate math so much, it's my least favorite thing.' And then I got to high school with that attitude, very different than the one I was entering middle school with, and then I had Sarah Strong as my math teacher. And throughout that first year and then a subsequent three more years where she was my math teacher, I learned that my fraudulent fondness had been just that, it had been completely fraudulent, and that the reasons I liked math, the pillars of what made me good, speed and accuracy, void of any real contextual understanding, were super arbitrary. And they were actually the reason that I wasn't able to deeply enjoy math at all because I wasn't coming at it with curiosity or creativity or any sense of relating it to my own life in the greater world. And then I learned how to do those things and I learned how to get excited about math, even when I wasn't able to do it really easily or really quickly. And then I started to love math and I still love math today. So that's what I would say my math story is.

Bethany Lockhart Johnson (06:36):

I love it. It's so interesting to hear that you have such a clear, and in the book you talk about it, too, this reflective sense, you're able to reflect on what that test meant. Like it could have



gone a very different way, right? Oh, which, folks, we should say that Gigi was in Sarah's class for four years. It sounds like this relationship you had was really healing.

Gigi Butterfield (07:00):

Yeah, it was amazing. I was like the luckiest high schooler ever.

Bethany Lockhart Johnson (07:04):

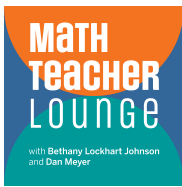
For reals. Yeah, that's beautiful. And it's so cool to hear that you were able to transform that and your relationship really evolved, you know? It evolved.

Dan Meyer (07:15):

I love your comment about how, 'Now I realize there's gonna be tough times, and that's not an indication of failure or a fraud.' It's actually a very real part about relationships with humans and with subjects like math as well. It's super fun to hear. I'd love to hear from Sarah. It's so wild that you two have been a part of each other's math story, to a significant degree. How would you summarize your math story?

Sarah Strong (07:38):

Certainly Gigi was a player in my ongoing math story as an adult. And I think that's also a part of it, is we all have continually evolving and emerging stories of who we are as math teachers, but my math story is kind of congruent to Gigi's and that's part of what's inspired this book is the phrase Gigi used in her 'Dear math' letter, fraudulent fondness, I had never thought of that beautiful alliterative phrase before. And I thought, 'Oh my gosh, that's what I felt.' And I had called it a fixed mindset, or all of these other things, but calling it fraudulent fondness was so poignant to me that I couldn't get it outta my head, and we just kept talking about it. And I think my fraudulent fondness started probably in high school. Before high school I think I was just really stressed out about math, because I thought I had to do really good at it and get things really right really fast or else I was dumb. So this was part of the fixed mindset piece. And so I wouldn't say I loved it in elementary school, I more felt the weight of it. And I remember especially timed tests, which we always hear about a lot. I just remember sweating and shaking and being like, if I don't get this the fastest I am a failure, I will cry. And that's not really setting yourself up to love a thing. So I was, it was a bit fraught and stressful, but then in high school I had this belief that I had to keep being



good at it, but I started getting a lot of positive feedback from tests and quizzes and teachers, that was like, 'Oh my gosh, you're so great at this. You should be in this class and look, you moved into Algebra Two as a freshman. Wow. Who takes Algebra Two as a freshman? You must be so smart.' And I was like, 'Oh, I am so smart.' But that is sort of an anchor for fraudulent fondness as, 'I like math because I'm in Algebra Two as a freshman.' That has nothing to do with being mathematical at all, necessarily. My senior year, my calculus teacher knew I was thinking of becoming a math teacher, so she invited me to support her for my math class that year in one of the freshman math classes with her.

Bethany Lockhart Johnson (09:54):

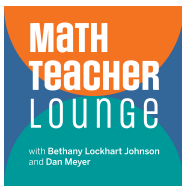
Wow.

Sarah Strong (09:55):

So I was like a teacher's aid as a senior. And it was there that I think I started to break down some of my assumptions of what it was to be mathematical and start realizing, I never had the term fraudulent fondness, but realizing that I didn't fully understand or grasp what mathematics was because the students in her ninth-grade class, I was getting to look at their work <laugh>. I was stamping their warmups, and there [were] so many interesting ideas on there that I had not confronted in my own math journey cuz I was really sucked into my, like, 'Hey, here is my work. And I checked my answer on the back and it was right.' I hadn't seen different ways of thinking about mathematics and my eyes were opened and that made me wanna become a math teacher even more. I'd say throughout college I did a lot of collaborating and working with others and really developed a keen excitement for different ways of thinking about math and then becoming a teacher, I mean that's the cornucopia, unique and creative math ideas are there in front of your face every day. And so I just thought it was the most fun thing to do. I started in sixth grade, to listen to what the students were saying and their conception of things and try to make sense of their thinking.

Dan Meyer (11:18):

There's something so joyful from the student's perspective of experiencing a knowledgeable other as being very curious about what they're thinking, whether it's right or wrong, maybe especially if it's wrong, I just, I think about that and how you've been a



part of people's joy in math class from even when you were a math student, as a pretty special bullet on your resume. Thanks for sharing all that. I would love for you to explain to the audience what the 'Dear math' assignment is. Would you paint a picture of what the 'Dear math' assignment was?

Sarah Strong (11:48):

Yeah, the 'Dear math' assignment was birthed out of a project I was designing that was supposed to take this really metaphoric lens toward math identity development. And in right triangle trig, we use the metaphor of shadows to look at the shadows of our math story. And then the 3D geometry was cross sections. Like what are these cross sections, these snapshots of your math story that tell a story. And what I wanted to do in that project, aside from exploring all these math ideas and then applying a metaphoric lens to our own math stories, was I wanted my students to get to identify where they experienced a fracture in their math journey and get to go work with a student in that grade as like, public service <laugh>.

Bethany Lockhart Johnson (12:33):

I got chills when I read that because I was like, 'Oh my gosh, if I could go back and talk to sixth-grade Bethany, what would I say?' Right?

Sarah Strong (12:42):

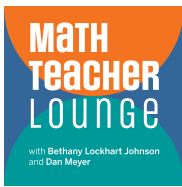
Yeah. And it's almost like you, for some students I noticed, they had this fixed understanding of themselves as a mathematician from that point forward, from a fourth grader forward.

Bethany Lockhart Johnson (12:55):

Totally.

Sarah Strong (12:55):

And they couldn't even acknowledge that they had learned mathematics since then. So it's like, you have to go backward. And actually, in helping some of those students, they were like, 'Oh, I actually understand fourth-grade math.' I'm like, 'Der! You're doing all of this



Math Teacher Lounge transcript
Season 4, Episode 4:
Dear Math

stuff right now!' But there was such this, I call it a math trauma, you know, I don't wanna throw around that word, but it really was, because it was impeding them from moving forward in their math journey. So anyway, I wanted to have a way that we could identify that piece of their story. And then, at the same time, we do project tunings at High Tech High, so before we embark on a semester, we chat with a group of teachers and they tune our projects for us. And a humanities teacher I was with was like, 'Oh my gosh, I have my students write "Dear Books" letters or something. It's modeled after that Kobe Bryant, Michael Jordan thing, you should have 'em do 'Dear math' letters.' And I said, 'Oh my gosh, you're right, I should.' So it came from another teacher at my school, and that's where it kind of started. And during that project, the students wrote their letters, but then we did a lot of analyzing and revising and adding to our stories throughout the semester to explicitly address our evolving understanding of our math identity.

Gigi Butterfield (14:11):

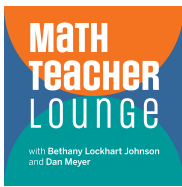
I will say as a student taking part in it, it was very cathartic, and yeah, I remember going back and helping a eighth grader with some of the math they were learning, and I think there's an element that you touched on, Bethany, of like, oh, when you go back to help someone, you realize they're so small and they're just trying their best. And I think with everything in math, it's very easy to be really hard on yourself and we label other people as good and bad, but before we even get to that, we label ourselves as that. And so in eighth grade, I had labeled myself as bad at math and then I went back and I started helping someone. And the idea of telling this young person that because they were struggling, they were inherently and endemically and forever gonna be bad at math is insane. And so you of course didn't do that, and you were kind of able to see yourself then in this young person and really heal a lot.

Bethany Lockhart Johnson (15:11):

That's so beautiful, yeah.

Gigi Butterfield (15:12):

It was pretty amazing. It was one of my favorite things I did in all of high school.

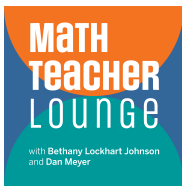


Dan Meyer (15:16):

I'm often guilty of assuming that other subjects have it better than math. I just have a hard time imagining that it would dredge up quite the same catharsis and psychological repair, for some reason math, and there's some amount of data on this, that math occupies a unique and kind of mythic quality in the mind of students as this really formidable villain in people's development. You've read all kinds of letters from students and I feel like you, when I referred to you as having this data set, like you have, I think, access to the psyches of students who have experienced that, you know, that math trauma, as you put it, Sarah. I wonder, Gigi, since you have the student's lens there on your classmates as you're examining those letters, what were some of the themes that popped out to you of why people find math so enormously challenging and hurtful in some ways?

Gigi Butterfield (16:14):

So the themes that Sarah and I found, and then eventually tabulated, end up being the different chapters of the book. So each chapter is an adjective that we saw coming up a lot in students' letters. So there's intimidating, hierarchical, useless. Those are some of the negative ones. And then in the back half of the book, we wanted to end on a good note, so we get to the positive ones and there's, you know, fun, powerful. Paradoxical is even one of them because, like all things, you know, it is. And so I think a lot of the reason that, to reference the title of the book, kids hate math, and to kind of echo what you were saying, Dan, because I do agree in some ways, that other subjects have it easier—like, I am a writer, I love writing, and I think it's because a lot of other subjects are viewed as less binary than math is. In math, you're right or you're wrong, you're good at it or you're bad at it, you're a math person, you're just born that way, or you're not. And I don't think that we view students in that binary manner in a lot of other disciplines. In writing, for instance, there's a lot of individual work with the teacher that goes on in improving things, or people can have their own style to their writing, their own flair, which I think is fully applicable to mathematics, but we're not teaching it that way.



Bethany Lockhart Johnson (17:42):

We have a friend of the show, Mandy Janssen. Her book, *Rough Draft Math*, reminds me of that idea that, I think you put it so beautifully, Gigi, that you're either right or you're wrong, right? And how can we create those spaces where it is complex and it is all those things you list.

Sarah Strong (18:00):

I was gonna say, that's why we actually ended the book on paradoxical, cuz we were like, 'We're gonna end on a high note,' and then we were like, 'Actually it's not realistic that everyone would think all these positive things about math all the time.'

Bethany Lockhart Johnson (18:13):

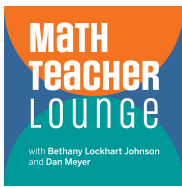
Yeah.

Sarah Strong (18:14):

Nor is it even the goal. It's actually really a part of the goal, is that we would, like you just said Bethany, be able to hold these feelings together and actually maintain a strong math identity through all of these emotions that come and go and to be grounded and like, 'I'm a mathematician because I am a creative thinker who asks good questions and makes connections and listens to other people's ways of thinking and models and all the math practices and all of these things.'

Dan Meyer (18:43):

So I'd love to know the kind of pushback that I imagine some teachers would offer here is that it feels, it has the feel of being non-mathematical, which is to say, it's not, you know, in my scope and sequence or my chapter list or that kind of thing. And I just wonder how you could, how you might respond to people who'd love to know like, what is the bang for the buck? What am I getting back as a return on this kind of investment?



Sarah Strong (19:02):

I have heard that very critique and I've sort of gotten to the point where I'm like, 'How can I start working with these students without knowing their stories before they've arrived to me?' Like I want to understand them and who they are so I can know them well and then support them on their math journey for this whole year. We're gonna be together for an hour every day for a whole year. <laugh> We've gotta know each other. So I've sort of, with students and even from students sometimes, I'll say, 'Why are we writing in math class?' What I usually try to do is offer them my story first. So I have my 'Dear math' letter and I read it aloud to them and I share my story with them and ask them, what surprised you? What makes sense? What parts of that did you connect with? And then I'll say for the next 20 minutes, 'I'd love to hear your math story. I know it's sort of unusual to do writing in math class, but this is gonna help me understand you more so that I can be the teacher that you need me to be for the rest of the semester. And I promise you I'm gonna read every single one and really be hearing your voice in my head as we go through the rest of the semester.'

Bethany Lockhart Johnson (20:07):

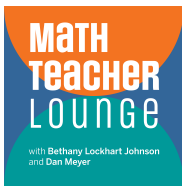
I've definitely had those assignments where I wrote something and maybe poured my heart out and then I had the sense that it was kind of just stuck in a drawer, right?

Sarah Strong (20:15):

Mm-hmm.

Dan Meyer (20:15):

I think there's something about these 'Dear math' letters, at least the ones that you shared in the book, the excerpts you shared in the book, that were vulnerable, that were, like you said Gigi, they were cathartic, right? So even though I wanna champion folks to do this in their classroom, it's like, as a teacher, whether you're curious or not, you still wanna handle these folks' stories with care, right?



Sarah Strong (20:41):

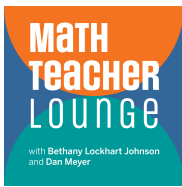
I think I write in the book about how, before I was about to read all the math letters, my heart would start beating fast a little cuz I knew there were gonna be kids in there that hate it <laugh> and I was gonna have to just accept it. But then I thought, well that's the most important thing for me to hear, cuz it, I'm delusional if I'm not accepting that they have those feelings as they arrive to me every day. I just think, 'Look, everyone showed up here and they're happy to learn with me!' But it also can feel heavy to the teacher. And so I like the 'handle with care.' Do something with the letters, confirm to the students that you read them and that you really value it, keep bringing it up, revisit it with them partway through the semester. It'll impact a lot.

Dan Meyer (21:23):

I'm curious, Gigi, what other experiences you can point to that were the work of mathematics, like through doing the math, where you felt like your relationship was being rehabilitated with mathematics.

Gigi Butterfield (21:36):

I would say one was my senior year, I believe. Sorry, you can correct me if I wrong, but I believe my senior year. So this was also, just to set the scene, height of COVID, virtual learning, perfect setting for kids to love math when there's chaos going on outside and no one wants to think about it. And Sarah implemented a project about voting systems around the world and throughout history and how voting systems are implemented into our modern day, how they work, the benefits and the drawbacks to different ones. And this was, you know, 2020. So it was during an election and it was so poignant that you couldn't, as a student, you couldn't not care about it, you couldn't not be interested. You were coming to the table with some opinions, some ideas, and then we got to explore those ideas further in that, the end of the project, the sort of final piece, was collaborating with a group to create your own voting system that you thought could solve most of the problems, if not all of the problems that the other voting systems were introducing. So it was so relatable and it was so important that the math that you were learning, the struggle of it, felt worth it. I still remember that math really well because I remember the purpose, I remember all of the applications. And that was an instance where I really remember



thinking, 'Wow, math is powerful. Math is absolutely powerful and is important to me as an individual.'

Dan Meyer (23:31):

What else? Yeah, I'd love to hear another one.

Gigi Butterfield (23:33):

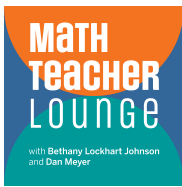
In collaborating with other students, which, at High Tech High, we did every day, and consistently with different people. And in doing that collaborating, it was really eye-opening to learn how many different skillsets there are within the discipline of mathematics. Because coming into this high school math classroom with that unfortunate binary thinking of, there's good and there's bad, one great way to disrupt that is to work with a lot of different people. And then you learn that people can be good at a lot of different things. There can be people that are fantastic at asking questions to understand the context more deeply. There can be people that are so great at creating tables and organizing thoughts. There can be people that are amazing at being skeptical of an answer, it seems like we've all come to a consensus and they say, 'Wait, that might not be quite right.' Or, 'How did you get there?' And it really makes you think deeper as a mathematician. And that's something that I've really loved and cherished about math as well.

Bethany Lockhart Johnson (24:36):

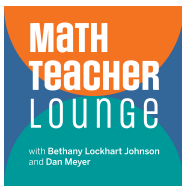
At one point, you reference a lot of different students, and I love going on the journey with them. And I'm remembering at one point, you talk about a student named Zelma who said she was bad at math, and then how she had all of these, and you say, 'reference points to support her claim.' And that phrase just stuck with me. How do you begin helping students speak back to that evidence? Because that evidence can be powerful.

Sarah Strong (25:05):

Yeah, I'm glad you brought up Zelma, cuz I thought her story was particularly poignant and it's told at the beginning of the Hierarchy chapter and, maybe it's obvious to people, but this chapter theme was maybe, statistically, the most prevalent in letters, this notion that students are always talking about how they were ahead or behind or not where they should be compared to either their perception, mostly their perception of everyone else.



And we did a focus group on this chapter with a group of students and they were saying, 'Nobody actually ever feels like they're in the right place. Everyone always feels like they're somewhere in this hierarchy that's wrong.' And I reference some research in there that there's this pervasive story of a narrow path of math learning that's sometimes in curriculum or in teacher prep programs or in schools. And it's one of the biggest problems in terms of helping students form more whole math identities grounded in a lot of different things. But Zelma was referencing that she felt like everyone else thought she was stupid and I was like, 'Oh my gosh, I'm so shocked. I don't see you in that way and I'm fairly certain that everyone else in this room doesn't.' It seems that she had built that thought of herself a really long time before. What I tried to do was to point out to her ways that I saw her being mathematical myself. But it was almost like she was like, 'Yeah, yeah, you're a math teacher, you're supposed to tell me that.' And so the intervention that we actually talk about in that book, in that chapter, is Belongingness Buddies, which is not necessarily something that you would have to do in math class, but I started realizing that in order for students to shift how they saw themselves as mathematicians, they needed to know that I saw them as a mathematician, but also that their peers saw them as mathematically valuable members of the community, authentically, not just like, 'Eh, my peer told me good job today.' What Belongingness Buddies did was, they checked in on each other. They were the person, like if you were absent, your Belongingness Buddy is texting you today and saying like, 'Hey, we missed you in math class today.' Like all these kinds of things. And I once even had a student FaceTime their person who was on a trip so they could participate in our daily discourse that day. And it just built this idea that we are a community and we actually all need all of us to be here for our community to be whole and functioning. And when one of our members is gone, we reach out to them because we're not whole without them. Through that the students were able to start developing deeper relationships with each other, in a variety of ways, but also where they were like, 'Oh, my Belongingness Buddy shared with me a new idea about this math problem and I learned something new.' Zelma, through working with her Belongingness Buddy, got some more confidence that I couldn't actually instill in her myself despite my best efforts, that her peers started celebrating her. She was an amazing discussion leader! She was so charismatic and she would be in the front of the room calling on people and connecting their thinking and she was like, the best at that. I started thinking, 'Oh my gosh, people need to tell her that she's brilliant and an important member of this community, all these people.'



Bethany Lockhart Johnson (28:29):

And when I think about joy in mathematics, which again is our theme for this season, belonging seems at least like, you wanna feel like you belong in the space. You know, if you're gonna experience joy, and you don't feel like you belong, how can you have space for that joy? Right? And it's really, really beautiful and I think belongingness or feeling like you don't belong in math class is something that comes up again and again when folks talk about not having joy in math. So the fact that you are calling that out and bringing it into your space, that's really beautiful. Thank you.

Dan Meyer (29:05):

Overall, this whole interview to me just speaks for how the most transformative work that teachers do as students often winds up transforming the teacher as well. And you've just described, and we've heard from other guests, Sarah and Gigi, just what this kind of work does on the people who are doing it, whether you're a teacher or a student. Thank you both so much. The book is called Dear Math, Why Kids Hate Math and What Teachers Can Do about It. We're so lucky to have had on Sarah Strong and Gigi Butterfield. Thank you both for being here with us and sharing so much knowledge and wisdom.

Bethany Lockhart Johnson (29:33):

Thank you so much for joining us in the Lounge. Thank you.

Sarah Strong (29:36):

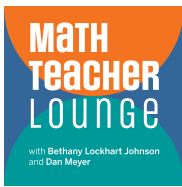
Thanks for having us.

Gigi Butterfield (29:38):

Yeah, thank you.

Dan Meyer (29:42):

Wow. That was a very unusual chat for a math podcast for math classes. It was off the beaten path for us, I think, I loved it. I wanna know what you think about it, Bethany.



Bethany Lockhart Johnson (29:52):

I definitely heard of an assignment where you share with the teacher your math autobiography, where you talk about your journey with math. But a 'Dear math' letter is a whole 'nother level. And the thing I loved most about it was the way Sarah was so focused on centering her students' experiences. I mean, Gigi's in college, you should have talked to me in college, Dan, I was not that self-reflective! I mean, that was awesome.

Dan Meyer (30:20):

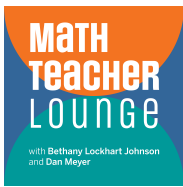
Yeah. Awesome. Same. And I hope to hear from you folks out there in podcast land, if you try this assignment with your students, it doesn't sound like it needs to take a long, long amount of time. Just some moments to reflect on your relationship with mathematics and to think about what to do next could be really valuable for you and your students. And we would love to hear more about that, how that goes for you and your classes.

Bethany Lockhart Johnson (30:43):

Yeah, and I think also remembering what Sarah said, that the biggest theme was that trust that she built, right? So she didn't assign it and then stuck it in the drawer. She used it to inform conversations with students. She said even, make sure you at least acknowledge that you've read them, you know, they're sharing something for some of them, something that they've never been asked before. And you're trying to create this relationship, this space for future conversations and you're building a community. I love it. So thank you, Sarah and Gigi, for being a part of this Math Teacher Lounge convo. We hope that we hear more from you listeners, like Dan said, about how this conversation impacts you and how you might use it in your classroom space.

Dan Meyer (31:33):

Find us @MTLshow on Twitter or the Math Teacher Lounge group on Facebook. And yeah, get in touch and we'd love to hear your own story about mathematics. We're doing a little bit of a book giveaway also in the Math Teacher Lounge Facebook group. So stop on by and share your story and get entered for a chance to win a book.



Math Teacher Lounge transcript
Season 4, Episode 4:
Dear Math