

**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

Dan Meyer: (00:01)

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

Bethany Lockhart Johnson: (00:03)

And I'm Bethany Lockhart Johnson. Hello! Happy New Year! Hello, Dan Meyer.

Dan Meyer: (00:09)

HNY, Bethany. HNY to you and to all of the listeners out there in Math Teacher Lounge. HNY is the abbreviation that I use sometimes.

Bethany Lockhart Johnson: (00:18)

Oh, is that what that is? Is that—I wasn't sure what that was. If on my birthday you send me HBD...no.

Dan Meyer: (00:25)

Yeah.

Bethany Lockhart Johnson: (00:25)

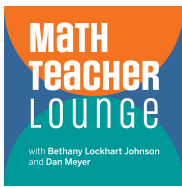
No. Unacceptable.

Dan Meyer: (00:27)

I will. No, you want the full thing. To demonstrate my care for your birthday, I gotta spell the whole thing out. I'm just trying to stay relevant. You know, I'm just trying to stay relevant and youthful. So I'm using The Abreevs.

Bethany Lockhart Johnson: (00:38)

The Brevvies.



**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

Dan Meyer: (00:40)

To the extent of even abbreviating the word "abbreviation." . So, any New Year's resolutions you wanna share with the listeners, Bethany? While you think, I'll just share mine real quick here. This is the year of the perfect Wordle streak for yours truly, Dan Meyer. I'm going the full 365. Watch. Watch me do it, folks. I'm naming it here. Live on air. recorded on air. Perfect Wordle year. What you got for the listeners, Bethany?

Bethany Lockhart Johnson: (01:10)

Let's see. It's raining very hard here in Southern California, and my newest resolution is to embrace nature. My child wants nothing more than to go and splash in all the puddles.

Dan Meyer: (01:22)

Nice.

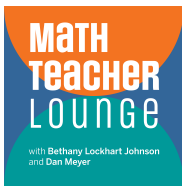
Bethany Lockhart Johnson: (01:23)

And be amongst the mud. And what I'm gonna keep telling myself—and so far, so far, I've been doing pretty good with this—thrive, child. Splash. Squish. We can dry you off. You will not melt. So I want to keep finding opportunities. Like, for instance, my response is, "It's pouring rain. Let's stay under covers and let's read this book together!" And his response is like, banging on the windows, like, "Please let me go outside." So I myself have some rain boots. I'm going to go forth and splash with my child. So hopefully you'll see me doing that a bit more.

Dan Meyer: (02:08)

Love that.

Bethany Lockhart Johnson: (02:09)



**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

Ask me what I'm doing. I'm outside, splashing in nature.

Dan Meyer: (02:12)

I don't wanna put words in your mouth, but I have felt a bit like parenting is a means for rounding out aspects of my own personality that I have felt are—or habits or hobbies that are lacking. Like, I've never been real outdoorsy or into camping, but I don't want that to limit my own kids' aspirations or interests. So let's do the thing that's not super natural for me, for their own sake. Which is kind of what I'm hearing a little bit from you, which—that sounds exciting.

Bethany Lockhart Johnson: (02:35)

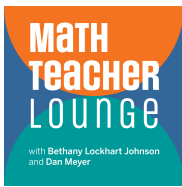
Do you wanna go camping together? Like, our families?

Dan Meyer: (02:38)

Uhhh. Let's take this one off the air. I also love something that's more relevant to a teachers audience that you said, that I think is super interesting, is how there's ways that we can make the jobs harder for ourselves, that are optional. And what I hear from you is like, "I'm just not gonna freak out. We're getting wet. We're getting soggy. And I'm just not gonna freak out." And I just think that that's interesting to think about, the things that we take on, you know, that's optional. Freaking out is optional, sometimes. And there's other areas, I think, for parenting or for teaching, where it's like, "Oh, do I really need to choose this particular battle?" And to reconsider that.

Bethany Lockhart Johnson: (03:19)

And in that spirit, our whole Wordle episode that we talked about? Do you remember you talked about how beautiful Wordle mistakes are, and how you keep learning from mistakes? I mean, you obviously want the final correct answer, but just, you know, when you get on a losing streak, Dan, I hope you'll continue to pat yourself on the back.



**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

Dan Meyer: (03:38)

Well, I will not be taking on a losing streak, or even lose one day. This is what's gonna happen here. I'm just speaking that and putting it out in the universe.

Bethany Lockhart Johnson: (03:49)

Speak it!

Dan Meyer: (03:50)

But if it happens, I will be taking a long break from all human interaction. And lamenting, as I do.

Bethany Lockhart Johnson: (03:59)

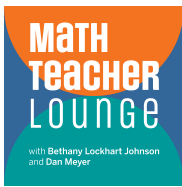
Camping. Dan's off in the woods, weeping.

Dan Meyer: (04:01)

That's right. That's right. Yeah. Well, we wanna share with you folks—an exciting programming note is that we are currently working very hard on producing a special fifth season of this podcast. You thought the other seasons were special? Let me tell you, this fifth season gives new meaning to the word "special." And we can't wait to tell you more about that. But in the meantime, Bethany, you wanna tell 'em what we're up to in the meantime?

Bethany Lockhart Johnson: (04:26)

Well, Dan and I went back and we were having a conversation about some of our most favorite conversations, or the conversations that people bring up to us. Like, when we were at the CMC conference, or NCTM, folks, when we talk about the podcast, they're like, "Oh, I loved this one." "Oh, I love this one." And that, to me, I don't know, that is exciting. And so, while we're putting together this new season



**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

over these next few weeks, we're gonna feature a few of our favorite conversations from our first four seasons. Dan, four seasons!

Dan Meyer: (04:59)

We've been at this for four seasons! And I do want to just emphasize something you said, Bethany: that all of our conversations are our favorite conversations. They're all our special children. What we just felt like you, the listeners, did not quite learn enough from some of these, and so we really needed you to hear them again to make sure you got everything that you should get out of them. So, let's tell 'em who's up first. And who's up first is a conversation we had about problem-solving with Fawn Nguyen, who's an advanced math team specialist here at Amplify. Been a former math coach, math teacher. Just really done the work, is what I'd say about Fawn.

Bethany Lockhart Johnson: (05:38)

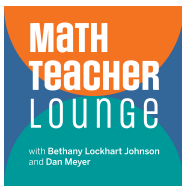
If you have been listening to this podcast, you're like, "Whoa, whoa. Wait, I have not missed an episode. I didn't hear Fawn's interview." That is because we used to be video only, not podcasts. So this conversation with Fawn was from, what, our second season?

Dan Meyer: (05:55)

Yeah.

Bethany Lockhart Johnson: (05:56)

And we were on video. And another thing about it is it was, this is a conversation that, when folks talk about problem-solving, a lot of the responses we've gotten are like, "Wait, I've never thought of problem-solving this way." In fact, you'll hear us say that exact thing. So we really appreciated the time with Fawn. And yeah.



**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

Dan Meyer: (06:17)

Enjoy it, folks. Especially enjoy Fawn's—I think a four-part?—definition of problem-solving, a word that's often kind of mushily defined. And Fawn really goes into, I think, precision and depth on it. So hope you folks enjoy it.

Dan Meyer: (06:35)

Give a wave, Fawn, to the camera. Would you? Cool. Fawn has been a teacher for a very long time. She is someone who could have left the classroom at any point and taken any number of jobs in the math-teaching universe. But I've always admired that Fawn has taught kids for a very long time, and that has given her, in my view, just a lot of clarity on what is important to her about students. I've seen her not get upset or obsessed with certain kinds of small niche issues that a lot of us, like, they get a lot of us down in the classroom, sometimes. And she's maintained a laser focus on among many other things, problem-solving as a virtue in mathematics classrooms. So, please welcome Fawn to our show. Fawn, thanks so much for being here.

Fawn Nguyen: (07:18)

Hey, thank you so much. Thank you. I am so excited and honored that you guys invited me for this, Bethany and Dan.

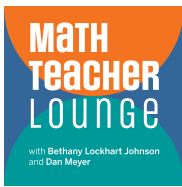
Bethany Lockhart Johnson: (07:24)

Thank you for being here.

Fawn Nguyen: (07:26)

I love you, Bethany. Dan, I can tolerate, but I love you.

Dan Meyer: (07:30)



**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

I really worked myself up there on that complimentary opening for you, and that's how you get me back, here? OK. Problem-solving is fully on the consciousness of math teachers. Every math teacher knows that they need to say, like, "Yeah, oh, problem-solving. Yes. Love it. Do it. I dig it." But even so, I feel like it's become kind of a buzzword. Like, it's not always obvious what that means...or am I doing problem-solving, really? So we're curious: As someone who is a problem-solving expert, who is asked all over the world to talk about problem-solving: How do I know if I'm doing problem-solving in my classroom?

Fawn Nguyen: (08:12)

This is not my definition of it, but—nor am I an expert, by the way, Dan, thank you! but I try really, really hard and work on it!—my definition—or it's not my definition, but I like it because it's short and honest—is "problem-solving is what we do when we don't know what to do." And so—

Bethany Lockhart Johnson: (08:32)

Ooh!

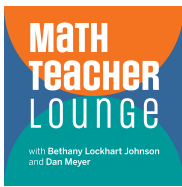
Fawn Nguyen: (08:32)

—with that mind-frame, I'm hoping teachers think more about what they task. Because I think it gets mislabeled a lot, as to what is problem-solving. If the kids already know what to do, there's a solution path. Then it's not problem-solving.

Dan Meyer: (08:48)

Yeah. So what are examples then? An example of, like, I might call something problem-solving, but it it fails that particular definition that you just proposed there. Very short, very honest definition.

Fawn Nguyen: (08:59)



**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

Just, it needs to have constraint and contradiction to what the kids think naturally. It should come as a surprise. There's an element of surprise in it. There's tension.

Dan Meyer: (09:11)

Maybe if there's harder numbers or, you know, decimals or fractions in the same kind of procedure...I can feel myself thinking, "Yeah, this is hard. This is problem-solving. Problem-solving equals hard. But we already know what to do."

Fawn Nguyen: (09:27)

Or just word problems. That's the most common thing. As soon as it just has words attached to the math, it becomes problem-solving. But that's just coding it to me. That's just coding it with words, wrapping it around. It doesn't mean anything until we read through and see if there's true problem-solving in it.

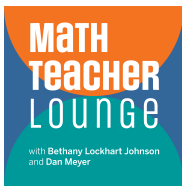
Bethany Lockhart Johnson: (09:45)

Like, what's the moment that it becomes problem-solving? In the way that you envision it?

Fawn Nguyen: (09:53)

Well, I think there's the bigger problem-solving of really bringing a task...I wanna call it left field. It just—we rarely ever, if ever, see it in the regular coursework, but it can also be problem-solving if we just take what we expect the children to do at the end of the unit, how about we front-load that? To me, that's also problem-solving. And I'm trying to encourage teachers to do that last problem first. The task writers put more thought—not that they don't do the rest of it!—but you know, this is a special one, because they label it "challenge," or "enrichment," or "are you ready for more?" I've seen those. And so it is this really special problem. And I would love for us to think about "do that first." Because my biggest fear is that because it comes at the end, that not all the children are involved. And so that to me is the saddest part. Because we might not get to it, right? In mathematics, we always think, "OK, well,





**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

let's do these problems and then we don't have time for the rest." But I think that's your richest task right there, is at the very end. So why don't we front-load it, start it, and it's OK—of course it's OK!—that we don't all get it. But the exposure to all students is so important. Talk about, you know, equity. Talk about that, everybody gets the same thing. If everyone dug into that first one with everybody's collaboration, and we get to share that, and then we leave it, because "Yeah, OK, now we learn more of the other stuff, right? That hopefully support. And then we can go back. And now everybody had a chance to go get into it, and then we can come back to it as, as many problems, we need to go back to it."

Bethany Lockhart Johnson: (11:37)

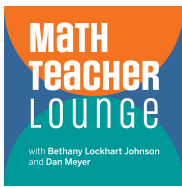
And that feels so powerful. Because it feels like—as a teacher, I'm thinking it would also inform my work, how I approach the unit, and how I approach the next steps. Right? Like, what kind of work would we be doing if I let it, if I allow it, to change the way that I approach the unit.

Dan Meyer: (11:58)

Yeah. What you're describing is so powerful, and really asks a lot of the task designers as well, I think. There are problem-solving tasks that really require, like, abstract knowledge of the way formulas and variables fit together. And what I love about what Amplify is doing with their problem-solving, what you're helping them do, is that they start with a true low floor that can draw in every student. And they might get stuck at different places; that's fine. But everyone has a way in. That's exciting.

Fawn Nguyen: (12:24)

It's a big deal for me to have this opportunity and this trust, to integrate problem-solving into the curriculum, make it intentional. It's difficult to implement. It is, to be honest. Because for me, what is a good task? This makes one of my four criteria: One is, it is non-routine. It is simply stated. Simply stated—that's like your



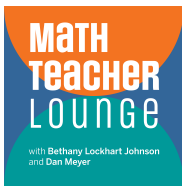
**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

low floor. And then has multiple solutions. And the fourth: This makes it. Because that the teacher enjoys solving it. And so you have to enjoy solving it to bring it. Because so that way I can say to my kids, "This is my gift." It really is, Because, you know, it has so much fun and joy. And I appreciate the struggle. And I wanna illustrate an example. For example, let's say Dan and I are classmates. And I know that Dan gets A's on his tests and the lowest score he ever got was an 89%. I, on the other hand, just sitting right next to him, I average D. I have a D average on everything. While Bethany, our amazing and wonderful teacher, brings in a problem. And when she brings it in, she says, "I worked on this problem. I found this problem; I worked on it; and I struggled with it. And it was amazing. I enjoyed it so much, I'm sharing it with you." And all of a sudden it's like, "OK!" And I'm sitting there, right? My teacher loves this problem so much; she's bringing it in to share with us. And now, all of a sudden, it's not, you know...and I know she only gives us non-routine. When she talks about problem-solving, it's non-routine. So it's not directly tied to the textbook that I've been struggling with. So it gives me a chance, it gives me a chance to contribute. To think differently. And now, suddenly I look forward to working with Dan, because in this space, in this problem-solving space, Dan is no longer Mr. Know-It-All. And so that's what I mean by—I am saying this a hundred times, and I will not stop saying it—problem-solving levels the playing field. Our world is filled with unsolved problems. Are you kidding me? Right? We look around us, we have so many things that are not solvable, or people are working on it, and yet in mathematics, what happens? The bell rings; we start; and we solve everything during that time, and we leave. And that's...yeah. No! No! We need to wrestle with problems.

Dan Meyer: (15:04)

And that was our conversation with Fawn Nguyen, which we first released way back in November, 2021. You folks can follow Fawn on Twitter at Fawn P Nguyen. Um, that's @ F A W N P N G U Y E N.

Bethany Lockhart Johnson: (15:18)



**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

So our episode today is a double feature. We are featuring another conversation that we loved from Season Two. This is a conversation with Christy Hermann Thompson and Kassia Omohundro Wedekind. They're authors of the book, "Hands Down, Speak Out: Listening and Talking Across Literacy and Math." And I don't know if you remember, but not only did we have a conversation with them, but we did a whole book study on Facebook, a Facebook Live book study, over the course of several months. And it was one of my most favorite things. And then they did a webinar at the end. So our conversation with them on the podcast for me felt like such a beautiful dive into their book. And you know, I've said it before, you think you have something down in the classroom, you're like, "Oh, hand-raising, I've got that down." You think you have it down, but then somebody says, "OK, but have you ever considered thiiiiis?" You know, and it just—

Dan Meyer: (16:17)

NOT that??

Bethany Lockhart Johnson: (16:18)

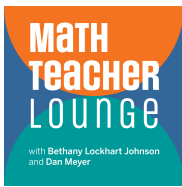
, Not that? Something totally different? And I loved talking with them. They're a lot of fun. And I loved the book.

Dan Meyer: (16:23)

Wonderful conversation, great book. Very provocative ideas. Yeah. As someone who's like, "OK, classroom management, I gotta get the hand-raising going...". In the classroom before we talked, they offered a really potent challenge to some really standard classroom management ideas. Yeah. Loved it.

Bethany Lockhart Johnson: (16:40)

And this conversation also offers some really practical tips for facilitating student conversations. So we think you'll enjoy it. Here's our conversation with Christy and Kassia.



**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

Bethany Lockhart Johnson: (16:53)

So today we are talking about "Hands Down, Speak Out: Listening and Talking Across Literacy and Math, K—5." And we have the authors here, Kassia Omohundro Wedekind and Christy Hermann Thompson. Before we begin, let's define what a hands-down conversation is. A hands-down conversation is just another way to structure discourse in your classroom. So in a typical classroom, you might see students raising their hand and waiting on a teacher to call on them before they share their ideas or engage in discussion. But in a hands-down conversation, it's students' ideas and voices that are taking the lead, and teachers are stepping back and focusing on listening and facilitating. Hello! Welcome to the Lounge.

Kassia Omohundro Wedekind: (17:44)

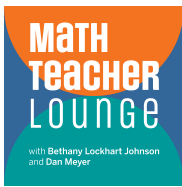
Thank you. We're excited to be here. We're fans of Season One. So we're ready to go.

Dan Meyer: (17:50)

I was a secondary teacher but I still found so much to love about the book. I think facilitating conversations is just generally challenging, and perhaps even more so in math, where answers feel so tightly dialed-in, in lots of ways. But I loved it. I would love for you to just explain to our audience, what is a hands-down conversation and how does that contrast with what might be standard practice for some people? For some classes?

Christy Hermann Thompson: (18:13)

We just started using the term hands-down conversation because we wanted to differentiate the fact that there are different times to have different types of dialogue in the math classroom, in the literacy classroom. And we use this as one of our tools. Right? It's not that every day, all day long, we're very against hand-raising and should never see that again. We find that having this as one of our tools will be



**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

where we make really clear to the students that this is a moment where we're turning it over to you to negotiate the space and make the decisions about when your voice comes in and who speaks next. You know, carry on kind of like that dinner table or that playground or, you know, whatever is your natural habitat for talk. And bringing that into the classroom and then hoping that it also someday transfers back out of the classroom back into the real world.

Bethany Lockhart Johnson: (19:09)

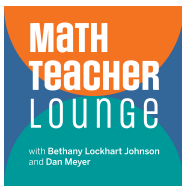
For the teachers who feel like that's terrifying to have students just start speaking, and speaking without any sort of control or my little equity sticks, my little popsicle sticks, or my popcorn, or whatever other thing they're using, what would you say is the first step?

Christy Hermann Thompson: (19:25)

So I think recognizing and naming that fear is part of it. And then saying to yourself, "What's the worst that could happen here?" You know, I think the worst that could happen is that nobody talks and it's totally silent. Or on the other hand, everybody talks at the same time. And both of those things will happen! And so what? It's gonna be messy. And if you just acknowledge that it's gonna look messy, and that's part of growing; that every child as they learn—and every adult—is messy as they grow.

Kassia Omohundro Wedekind: (19:59)

And we have to see what kinds of things will happen in a hands-down conversation. Like there's no prerequisite. You just start and then you see what happens. And those are the signs that tell you, "What can help this community grow as talkers and listeners? If everyone's talking at the same time, and they're kind of pushing each other over with their words by saying, "I have something to add!" "I have something to add!" or something like that, that's a common thing that sometimes happens at the beginning. Then you know that the next step is to do some work about how to



**Math Teacher Lounge transcript**  
**Winter Wrap-Up, Episode 1:**  
**Problem-solving and facilitating classroom discussions**

hold your thoughts back, how to add, wait for a space in the conversation to talk. And those are all things we need people to know out in the world.

Bethany Lockhart Johnson: (20:41)

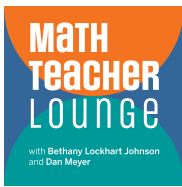
So can you give an example of a micro-lesson that...well, first, what do you define as a micro-lesson? And then, what's an example of one that maybe somebody who wants to dip their toe into the world of hands-down conversations that they could try?

Christy Hermann Thompson: (20:56)

The reason we call them micro-lessons is because we wanted to differentiate from the term mini lesson, which is out there and tends to describe about 10 or 15 minutes that might take place at the beginning of a work period of time. And this is much smaller than that. We usually follow a pretty predictable structure of naming. Here's this thing that's so helpful when we're having conversations, and we love to especially be able to name something that a student had done: "Kaylee did this yesterday and it really helped us." So what we might call that is, "And then here's how Kaylee and other people might do that. They might do something like this." And, you know, having a little anchor chart, so there's a visual reminder of that skill. "So when we're having a conversation today, you could try...". And that's basically a micro-lesson, just in a nutshell.

Kassia Omohundro Wedekind: (21:51)

When I was doing these hands-down conversations and I had more space for myself to listen as a teacher, I'm like, "Well, look at those kids, like, slumped onto the ground, like, pulling the carpet apart, but they're having this amazing conversation!" And so I learned that listening is a lot broader. So in this lesson that I'm thinking about, we just talk with kids about what are lots of different ways that listening can look like. Sometimes with younger kids, I'll take pictures of them listening in different ways and we'll notice things about them together. And then we



**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

invite them to talk with their Turn and Talk partner about like, "How do you like to be listened to?" Or "Tell me about how you listen." And just kind of broaden that. And really, I like to think that like the micro-lessons are for the kids, but also I'm saying those things to say them for myself. Like, "Remember, you don't have to insist that kids are staring each other down in the eyes all the time. Like, "It's OK when they're doing other things. There's other ways of listening." So I think I've learned as much from the micro-lessons each time I do them as the kids that I'm trying to help grow as listeners and talkers, as well.

Dan Meyer: (23:00)

You folks have a lot of really eloquent ideals you express, around democratic classrooms and engagement. But you also have just some very tangible, practical...even down to, like, how a teacher positions their body in space and the way they use their eyes to connect. I think it would be really helpful for teachers to hear that it's not just they're signing on to a manifesto of sorts, but there's ways they can act their way into the beliefs that you both expressed here.

Christy Hermann Thompson: (23:26)

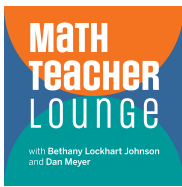
When I'm starting hands-down conversation work, if I put myself a little bit outside of the circle and look down, and give myself a clipboard, it helps me bite my tongue and it helps me give better wait time and see what the kids are doing before I have that tendency to jump in and teach and do lots of teacher-y things.

Bethany Lockhart Johnson: (23:48)

Kassia and Christy, thank you so much for joining us. We are so excited to have this conversation and to share your work. This is exciting. And I feel like this conversation is just the beginning of a deeper dive into this book.

Kassia Omohundro Wedekind: (24:01)

Thanks for having us.



**Math Teacher Lounge transcript  
Winter Wrap-Up, Episode 1:  
Problem-solving and facilitating classroom discussions**

Christy Hermann Thompson: (24:02)

Thank you.

Dan Meyer: (24:03)

Thank you both.

Bethany Lockhart Johnson: (24:06)

Thanks so much for listening to our conversations with Fawn Nguyen and Christy Hermann Thompson and Kassia Omohundro Wedekind, both of which were released in 2021, part of our second season. And, you know, we hoped you enjoyed listening to it for a first, second, maybe third, fourth time.

Dan Meyer: (24:24)

Let's be real. There's some real fans out there.

Bethany Lockhart Johnson: (24:26)

We loved it then. We love it now!

Dan Meyer: (24:28)

Yep, yep, yep. Please keep in touch with the show by following us on Twitter at MTL Show, and join our Facebook group, the Math Teacher Lounge community. We'd love to hear from you there. And please stay tuned for more info on what we're cooking up here in the Math Teacher Lounge. Thank you folks for listening. Take care, Bethany.

Bethany Lockhart Johnson: (24:47)

Bye now.