Mark Royce (00:00):

So, hi, Jeremy, how are you doing?

Jeremy Secaur (00:03):

I'm good. How are you?

Mark Royce (00:05):

I am excellent. Thank you very much. I'm glad you could join me to chat about modeling today. I know you've been teaching since about 1998 or so at the same high school for 23 years.

Jeremy Secaur (00:21):

Yes, that's right. This is, I'm still at my first grown-up job.

Mark Royce (00:26):

You don't look old enough to have been teaching that long, man. I was really surprised when I saw that. And you focus on AP physics and honors physics at your school, is that correct?

Jeremy Secaur (00:40):

Yes. I teach honors 11th grade and then as a second-year course, I teach AP Physics C.

Mark Royce (00:48):

Yeah. And I noticed that you're also involved with something called your academic challenge team at the school. Can you tell me a little bit about what that is?

Jeremy Secaur (00:59):

Yeah, it's like a Quizbowl Jeopardy-style competition that we do with area schools. So the students in my school who are into that sort of thing -- general knowledge competitions -- you know, they just compete against area schools. It's fun.

Mark Royce (01:22):

Yeah. Cool. You must be busy. 'Cause I see you're also the director of the drama club at the high school.

Jeremy Secaur (01:31):

I was the technical director you know, like working like sound and lighting, things like that with the drama club for 16 years. I quit that a few years ago. Just because, family and all sorts of other things, you know, it was a pretty big time commitment. And so I just couldn't keep it up, but it was a lot of fun and it really transformed the way that I interacted with students from early in my career and helped me see students in a different way. I would definitely encourage any teacher to, to be involved with extracurricular activities with their students.

Mark Royce (02:11):

Are you still interested in dramatic arts and theater arts?

Jeremy Secaur (02:16):

Yes. for sure. And I miss working backstage 'cause it was just so much fun, always troubleshooting, you have no idea what's going to go wrong, but you know, something's going to go wrong. Like trying to figure out ways on the fly to fix those things where hopefully the audience never even sees what you were dealing with backstage. Like when you've done your job well in technical theater, nobody even knows what it is that you've been doing. I really enjoyed that challenge, and also, I'm hoping post pandemic, I would like to take an improv course 'cause I've never been like never been onstage ...well, except for once a small skit that I did with some students, but never really been onstage and never wanted to be. But just thinking about that as a way of challenging myself and growing and experiencing what it's like to be a learner out of my own comfort zone. I think that'll be really interesting. So a friend and I hopefully are going to do an improv course when we feel safer that the pandemic is behind us and a good friend of mine encouraged me that's a good idea. You should do that. So that's what I'm hoping.

Mark Royce (03:35):

Do you see how that might inform and, and connect with you as a teacher in the classroom?

Jeremy Secaur (03:43):

Absolutely. Yeah. Because you know, what we're doing as teachers is we're always trying to get our students to ... in some ways you have to be intellectually uncomfortable. I don't want my students to feel like physically uncomfortable or unsafe or anything like that, but like whenever we're learning, there's some intellectual discomfort. And I think that to help me fully feel what it feels like to be a student in school, I need some periodic reminders of that. And so putting myself in an intellectually uncomfortable space can help me maintain that empathy for my students.

Mark Royce (04:36):

Yeah. So let's talk about modeling. I know you've been teaching for a long time, but tell me about when and how you got connected to the modeling concepts to the to the modeling community.

Jeremy Secaur (04:55):

Well, I couldn't possibly tell a story about my relationship to modeling instruction without talking about Holly McTernan, who is a physics teacher in the Cleveland area. I'm just outside of Cleveland. And so is Holly and I've known Holly since just about the beginning of my career, where I took a workshop at Cleveland State University, about 20 years ago where that was my first real introduction to student-centered learning where like I had learned in my teacher school classes about, like "students can construct their own meanings" and in some of my coursework, but it didn't really feel like, and maybe because I wasn't being taught that by science teachers, but I never really quite wrapped my head around, how do students just decide what what's true? That doesn't make any sense to me when I was in teacher school at first.

Jeremy Secaur (06:00):

But then I took a course at Cleveland State just grounded in the, the work of Lillian McDermott and her physics education research group at the University of Washington. And we learned there, ways to help students construct their own understanding. And that was the first time I really got a good sense of how students can build their own understanding of the world where they're not just like making stuff up, but we're grounding this in evidence. And then, always coming back to, "how do you know that, what evidence supports your idea" and really putting student reasoning at the center of our teaching. And so I

took this course about 20 years ago and Holly had taken that course the previous summer. And so she was a TA for that course. And so that's where I first met Holly.

Jeremy Secaur (06:58):

And then we just kept on running across each other because we're both people in the Cleveland area who were just really interested in stretching ourselves and growing as teachers and taking all these workshops and courses being offered in the area to improve our teaching. And so we just kept running into each other over and over. And then we knew each other through our local chapter of the American Association of Physics Teachers. And then, oh, I don't know, maybe 10 ish plus or minus a few years ago. Holly went through the master of natural sciences program at Arizona State and that's centered in modeling instruction. And so then she became a modeling instruction leader and Holly was really committed to bringing modeling to the Cleveland area because there were workshops in the Columbus area run by Cathy Harper, who I know you've had on the podcast before and who was my freshman TA in my college physics courses.

Jeremy Secaur (08:09):

That was fascinating to me to find out years later, like, oh, I know who she is. So that was exciting. But Holly, there were these workshops being offered like in Columbus, but I never felt like I could take that time away from home, you know, to just uproot and go somewhere else for a couple of weeks. So I never took a modeling workshop for years and years, even though I knew about modeling and I wanted to do it, but just never managed to take a course. And then Holly brought modeling to the Cleveland area because that's just the kind of person Holly is. She's gonna find a way to make it happen. And so then, when she offered this course in Cleveland, immediately I'm like, yes, I'm going to sign up for that. And so I took two workshops with Holly in the physics area, and then she recommended me to go to the leadership training so I could lead modeling workshops. And I do that now. And so really like my whole journey as an educator, Holly is a central player in all of that and in my becoming a member of AMTA and a modeler and a workshop leader. So much thanks to Holly McTernan for being such a wonderful human.

Mark Royce (09:33):

Yeah. So how did Holly get connected to the whole modeling thing? Was it through her trip to ASU?

Jeremy Secaur (09:42):

She was exploring different different master's degree programs. And I think she thought she was going to go to one other place, but she's like, well, I might as well visit Arizona State. And then as I remember her telling the story, as soon as she got to Arizona State, she just fell in love with this program, and it's centered around modeling instruction. And so that was how she got linked up with modeling.

Mark Royce (10:08):

Right. So you're also involved with STEMTeachersCLE. Or Cleveland, I assume the CLE stands for. Tell me about your involvement with that organization

Jeremy Secaur (10:20):

Three and a half years ago. We first put the organization together. Another physics teacher in the area, Michael Lerner, really spearheaded that move. And, and he's a fantastic teacher and he's somebody who I love to have around my area, because he's somebody I can always bounce ideas off of. And he's

got so much great thinking about teaching, but when we just started some dialogue, you know, Michael was just thinking like, who do I know around here? Who's a science teacher who would want to do this organization with me? And so Michael and Holly and myself, and a bunch of other wonderful teachers in the area just worked on putting together --let's put together some bylaws and let's make an organization. And and so like the fundamental idea is professional development for teachers by teachers, which I think that, like that concept, that kind of slogan, I think probably originated with one of the other STEM teachers, organizations, probably STEM Teachers NYC would be my guess. But you know, the the idea is just that teachers sit through professional development all the time where they're thinking like, when's the last time this person's been in a classroom? And, and I know in my own school district, our most popular professional development days are the ones that are teacher-led because teachers want to hear from other teachers, you know, like what ideas are you doing that work?

Jeremy Secaur (12:13):

And I think that there's a lot of room for philosophical thinking about teaching from people who aren't in the classroom, but ultimately to translate those things into the classroom takes a lot of work. And so to hear from a teacher who has done it in their classroom and had the successes that we want, like that's what teachers want and need is to hear from other teachers, how can I do a better job of this? And so that's what our core mission with STEM Teachers CLE is-- practicing teachers, sharing things that work with other teachers.

Mark Royce (12:56):

So how widespread is the modeling methodology in the Cleveland area? Is it spreading as a choice of teachers, especially in the STEM community?

Jeremy Secaur (13:09):

I think so, maybe slow but steady growth. There's a fair number of teachers around Cleveland who have done the workshops in Columbus. The ones led by Cathy Harper. And, and then Holly started some workshops in the Cleveland area. And then my school has hosted three modeling workshops. And so it felt like we were starting to get on an upward trajectory with running modeling workshops around the Cleveland area and bringing this to more and more people and then the pandemic hit. And so we haven't run any workshops since the pandemic hit, just because well... We haven't run any workshops since the pandemic hit, just because we could never feel confident that like, will it be safe? Will we have a school that's committed to giving us space and they won't back out if things take a turn with the pandemic. So hopefully next summer, we're going to have a biology workshop that we're excited about that we've been trying to do for two years now. Hopefully that'll happen in summer 2022.

Mark Royce (14:27):

Let's talk about your practices in your classroom as a modeler. What practices are you finding most effective in your classroom? What are you discovering about your own teaching in your classroom as a modeler?

Jeremy Secaur (14:45):

Well, that's a big question.

Jeremy Secaur (14:51):

Where to start. I think one of the biggest things that I've just been working at and getting better at over the last several years is ways that we use whiteboards in class where I think somebody who's not a modeler might look at that and think like that's a place where you share, like, that's a place where students show last night's homework. Okay, that can be one part of it. But really a lot of times when I have students using whiteboards, my end goal, isn't really even to have them sharing their work with others, the end purpose for me choosing that is to have students thinking together. And if I assign them a task, like just yesterday in my 11th grade classes, I wanted them to sketch out what would it look like if we had this buggy and that buggy moving in these ways?

Jeremy Secaur (15:57):

Can you put those on the same set of axes, you know, to just stretch their thinking just a tiny bit. And if I had asked them each to draw it on their own paper, then there would be... In a group of four students, there would be four individuals thinking on their own paper. And then the conversation would be, what did you get? What did you get? What did you do? And, and instead then by having them do it on a whiteboard, then they're negotiating those ideas as they go. And so it's four minds working towards one thing instead of four minds working on four separate things and then deciding how they agree. So the mental processes are different if they're working on one shared space versus their own spaces. And also it's just so much easier to take intellectual risks on a whiteboard because nothing is permanent on a whiteboard.

Jeremy Secaur (16:57):

And, you know, if you think about students writing out their ideas on a piece of paper, a lot of students aren't going to want to commit to writing until they're sure of their ideas, because when you're writing on paper, even if you're erasing, on some level you're committed, but on a whiteboard, you're not really committed to any one idea because it just wipes away in an instant. And so you can do more intellectual risk-taking on a whiteboard. And so I'm using whiteboards... Every year I feel I get better and better at making choices about how to use whiteboards to steer. Like, what are my students going to think about and how are they going to be thinking more so than just like a way for me to see what they're thinking.

Mark Royce (18:01):

Yeah.

Jeremy Secaur (18:01):

So does designing how they think and not just designing a place for me to see what they think.

Mark Royce (18:12):

What have you learned in your classroom about using a Socratic approach to dialogue in the classroom? Can you tell us a little bit about what your experience in that arena has been?

Jeremy Secaur (18:26):

Yeah, and that's something that I was working towards even long before I started modeling. Like, when I had been learning about Lillian McDermott's work. I was trying to for a long time, trying to shift away from me telling students here's a true thing. Because you know, like every one of us who has ever had any kind of relationship with another human being knows that telling somebody something and them internalizing that thing are not the same. We've all told somebody, like a friend or a family member, we

tell them something. And then later on they're like, I didn't know that how you didn't tell me that. You know, saying a true thing in the presence of another human being doesn't make it stuck in their head.

Jeremy Secaur (19:27):

And, and so for, for a long time, you know, I was trying to find ways to pull student thinking into the center of my classroom. Although modeling instruction really helped me focus that so much better. And so modeling really to me, felt like a key piece that I hadn't quite figured out about how to get authentic dialogue from my students, but it's something that I'd been working on for years and years and years. And I had a student, oh maybe two or three years ago -- he had me in 11th grade. And then again for 12th grade AP physics, and in the spring of his 12th grade year, he asked me a question and I answered his question. And then he started laughing. What are you laughing at? I wasn't trying to be funny. What, what did I do? And he just said like, that's the first time you've ever just answered my question with an answer instead of a different question.

Jeremy Secaur (20:42):

And there definitely is a place in talking with students. Like there are definitely times when, what they need is a direct answer. Sure. And there are times when a direct answer is just going to stop their thought process. And it's a real challenge as a teacher... We're never going to always get it right. Like we make thousands of decisions every day and some of them are going to be the wrong decision, but making that choice of how do I keep a student thinking? Do I keep them thinking by giving them a direct answer to this question, because that's not really the core idea that, you know, like this is something that they're stuck on. That's distracting them from the thing that I really need them, want them to be thinking about? In that case, then I want to give a direct answer.

Jeremy Secaur (21:39):

But if that question is along the lines of the thing that I want them to be thinking about, then I'm a whole lot likelier... I'm very likely to answer that question with a different question, just to help get them thinking about something else that can hopefully help them. You know, my goal would be to help them figure out their own answers to their questions. And I don't always succeed, but that's the goal. And so like, it's a big challenge to lead that kind of dialogue, where it continues to be productive and I certainly make mistakes, but you know, and it just takes practice over and over and over again, and building up a tool kit. There's a great paper that I've lost track of how many times I've read it.

Jeremy Secaur (22:43):

It's called the talk science primer or the talk science primer, depending on whether you like the British or American pronunciation. But the, the talk science primer is a great paper from, oh, I think it was published around 2012 or so. I love the framing of like what they call talk moves for teachers, where a move is, a thing that a teacher can just... we can hold in our back pockets to, you know, like when a student does this, I've got options of how to respond. And so those different talk moves are just different ways of responding based on like, what's my goal. If I want to elicit more ideas from the rest of the class, here are some moves you could make to do that.

Jeremy Secaur (23:35):

If I want to see if students are understanding what each other are saying, then there are some moves that I could do to pull that out of the group. If I, want to know, do students agree or disagree with the different thoughts that they're hearing their classmates saying there are different moves. And so, the

talk science primer really does a good job of laying out how can we as teachers lead good dialogue, lead good discussion to get students talking about the things that we want them talking about. And, and whenever I talk with other teachers about about their work in terms of leading class dialogue, the talk science primer is always what I steer them towards as like a first, you know, like you really need to read this paper.

Mark Royce (24:33):

If our listeners wanted to find that paper, do you, do you know where that might be found?

Jeremy Secaur (24:40):

Yeah. And actually I'm pretty sure, like if you just Google talk science primer, it is like the PDF of it is like the first hit that comes up on a, on a Google search. And so I assume that it's freely accessible,

Mark Royce (24:56):

Right. We'll look for a link, and post it on the website so people can go find it there. That's great. It sounds like a really good resource. So let me ask you what's a secret that you wish you had known before you started modeling that you've discovered that you wish you had had in your pocket earlier?

Jeremy Secaur (25:21):

I think to me the biggest thing probably is how, before I was modeling, I really wanted student engagement and student dialogue. And like I said, I had been working on those moves to get dialogue with my students, but I never felt like I was successful enough at it. And the thing that as soon as I realized it from my modeling workshops, after the fact, you know, it feels obvious, but before then, like it had apparently never crossed my mind that inviting students to join a discussion isn't necessarily enough because it's so much easier as a student to sit and listen than to choose to jump into a discussion. And so you just aren't going to get the same level of success unless you structure your classes so that students talking about their work is just built into the structure of the class.

Jeremy Secaur (26:33):

And that's where, with modeling, having our what we generally refer to as board meetings where, you know, like after students have done a thing where they've worked on some common experience, then, we're all sharing our whiteboards of our work and, we arrange ourselves so that we can all see everybody else's work and we can see everybody else. And then we can talk about like, what similarities do we see? What differences do we see? And so that just creates a class structure that makes talking about... That makes students talking about their thinking is just built right into the structure of the class. Instead of me standing at the front of the room saying like, all right, who notices something interesting, just silence, you know, because, because nobody's going to want to like, Ooh, let me dive into that.

Jeremy Secaur (27:34):

Because you know, like humans, we like to be right and we don't want to ... And it's a real intellectual risk to just put your thoughts out there. And, as modelers, I think we have to always be conscious of that. We're asking our students to take intellectual risks. And so to help them, we need to structure our classes in ways where the norm is. Okay. Now it's your turn to talk about what you're noticing, what you did, what you think this means --to make it the norm for students to talk about their own experiences. And also, I think what's really important there is that these teaching methods can be great for elevating student voices, but we also have to be really, really, really careful that when we open up dialogue to the

room and we put students in the center, we have to be careful that we're not accidentally amplifying any differences in terms of like cultural status.

Jeremy Secaur (29:00):

So there are some built in societal norms about who does science and who is science for, and if we're not conscious about managing the discourse in our room, then we can unintentionally amplify those differences. If you Google famous physicists-- I'm a physics teacher. So physicist is what first comes to my mind. If you Google famous physicists, then what comes up is a long list of white men. And maybe you get Marie Curie in there somewhere. But it's generally a list of white men. And, you know, and if you watch TV shows like Big Bang Theory, then they reinforce these cultural expectations that we have about who is physics for, who does physics, who is a physics person. And, and we need to be really careful that we, that we push back against those norms and our students don't show up to class expecting anything other than what's been culturally laid out for them you know, like in American society.

Jeremy Secaur (30:23):

And so we have to be responsible for pushing back against that. And so if we're not careful with how we manage that discourse in our classrooms, then we can unintentionally amplify that idea that well, physics is for white men and they're the real leaders here. And so we have to be really careful about making sure that everybody in our classroom has a voice, that everybody in our classroom is valued. And that there are a lot of ways, a lot of different ways to be a good science student, other than be the person who gets right answers all the time, so that we can work on breaking those norms of who is served by physics and who belongs in physics. Because if my students don't feel like they belong here, then they're never going to-- then I'm not putting them in a position where they can feel like this is a class that's really for them where they can be successful and enjoy it.

Jeremy Secaur (31:28):

And I find one resource that I really like and full disclosure. This is my third year of officially working with the STEP UP program from APS, AAPT and Florida International University and and some other organizations. So STEP UP is an organization where we're actively seeking to to break people's perceptions of those norms and to change the culture that surrounds physics and, like what does a physicist do? And like, who does their work benefit? And what does a physicist look like? We want to break the cultural norms that surround those things. And, and one of the resources from STEP UP is a set of guidelines for classroom conduct during discussion. And I've got posters of that on different walls of my room. So we can talk about those and like, why do these things matter to us in our, in our discourse in class?

Jeremy Secaur (32:49):

Early in the school year, especially I have to keep on coming back to is to balance your talking and your listening. Because there are some students and, this happens every year where there are some students who, as soon as I pose a question, they're ready to answer it. They want to pounce on answering that question. But then when there's somebody who is, and I appreciate their eagerness really. But also when there's somebody who's just always talking, whenever I ask a question, then that's going to send other students the message that like, well, they're just going to talk anyway. And what we especially have to be careful of is students talking over other students, you know, and when that happens, like, no, no, no, this person is talking right now. You need to wait, but and so after talking about the why of that,

then it becomes a whole lot easier to just, you know, like point to that poster and remind, you know, like, Hey, I just want to remind you of this norm that we have here when we're in discussion that, you know, like we want to value everybody's voice because every different person in this room has a voice that matters. And we're going to do our best work as a collective group of humans when we're hearing a broad diversity of viewpoints. And so if we're missing somebody's voice, we're definitely not going to be doing the best work we can do as a community of people who do science. And so for that reason, I appreciate your enthusiasm for this, but you need to balance your talking and your listening.

Jeremy Secaur (34:45):

And another great phrase that I picked up from my friend, Chris Newton -- I've worked with her on leading a couple of modeling workshops. W A I T. Wait. Why am I talking? And also, why aren't I talking, you know, just as a reminder for students, do people really need to hear your opinion for the 18th time today? Versus, you haven't spoken up in class all week long. Why not? You know, and I'm not going to say that out loud to them, but, why haven't you been speaking in class? Like, that's just going to make them feel worse. But to, to encourage them, you know, like reflect on, why haven't you been saying anything? And certainly, if there's something unintentional that I'm doing, I want to know about it, for sure.

Jeremy Secaur (35:47):

Please give me that feedback, but also, is there a reason that you're not talking and is there a thing that we can do to address that? You know, just to help everybody feel like they have a voice in the class is essential. And so like the resources from STEP UP, I find to be really helpful for that. And to just like constantly continuously monitor the vibe of the room. Are we hearing from the same people over and over, because if we are, we need to actively work on changing that. And what can I do? What strategies can I do to pull out different voices in the room? And it just takes constant monitoring.

Mark Royce (36:34):

I think the whole idea of equity in the classroom is so important in today's world. Teachers in general, in the classroom need to be very aware, as you're speaking, there are so many ways that equity can play out in the classroom you know, equal voice time for the students and creating an environment that allows and encourages that is very important. And I'm really glad to hear you talking about this subject because it's very important today. Thanks. So I'm going to ask you to think about your number one tip for, let's say someone's listening and they're a relatively new modeler or new to even the idea of modeling. What would be your best tip that you would give to our listeners about teaching in the modeling methodology?

Jeremy Secaur (37:33):

I think the thing that is most on my mind today just because I had yesterday in class, out of my three 11th grade classes, two of them felt like they went just the way I would want them to go. And one of them felt like everything I did was wrong. And, also then, the one that I carried home with me was the one where everything, every choice I made, went wrong. Instead of the two positive experiences, I'm bringing home with me, the one where I struggled. And so something that I think is just really important as a continuous reminder and for myself, because I've been teaching for two plus decades, I have enough positive experiences and I have enough feedback. I have enough evidence that tells me that in the big picture, what I'm doing is better for my students than other choices I could make. And so it can be really easy, I think, for a new modeler to feel frustrated, especially because we're changing the rules

at the beginning of the school year, especially like we're changing the rules for our students on what does it mean to be a good student? You know, like I have, and teaching honors students in 11th grade, they have an expectation in general, like they know how school works and they know how to succeed in that system. And we live in a society that values high grades. The learning doesn't even matter. It's the grades that matter. And, and so they know how to get high grades, you know, scholarships are tied to their grades, scholarships. Aren't tied to how much they've learned. College admissions are tied to their GPA, not how much they've learned. And so students have learned, reasonably so because they get rewards for high grades. They don't get rewards for good learning. You know, they've learned how to work the system, and now we're changing the rules of the system. And so you can definitely get pushback by students at the beginning of the year.

Jeremy Secaur (40:16):

And so it can be really easy when you feel like your students aren't buying into this, it can be really easy to surrender, you know, like, why am I fighting this? You know? And, and so when a new modeler takes a modeling workshop, they can be really excited maybe in the summertime when they do their workshop. And, you know, so then they try implementing these new ideas in the fall, and then they get, they get pushback from students. Maybe they get pushback from administrators or parents. And so it can be easy to go back to something that's easier. And then especially, you know, like as we get further into the fall and we just feel more and more tired, it can feel so easy to fall back on ways that we've done things before and move away from those those modeling moves that we learned in the summertime.

Jeremy Secaur (41:17):

And so for a new modeler, then I would say, you've got to find some support, find a support system where you're reminded of like, why are you trying to do these things in the first place? Like, there's a reason why you wanted to pursue modeling after you took that workshop and when you started school in the fall. And so to have some way of knowing, yes, this is worth the struggle right now. And that means a support system of other humans who know what you're trying to do and why. And that means you know, having some conviction that like, yes, I am doing, even if it might not be popular right now, I'm doing what I think is best for my students. And so, I need to carry on doing this because I do have reasons why.

Mark Royce (42:26):

Hmm. Yeah.

Jeremy Secaur (42:28):

And, and having that support structure makes all the difference in the world and, I'm an experienced teacher. But you know, I still have days where I feel bad about my teaching. And so, I've got a small group of close friends who are also modeling teachers and so like, after my classes yesterday, where I had one that just didn't feel like it went right. The first thing I did was, I texted those friends because I trust them and they can give me some perspective on my own teaching. They can give me the feedback that I need and having a group of people like that makes all the difference.

Mark Royce (43:18):

Yeah. That's great. It makes me want to ask you about your connections with the AMTA and how have you found it as a resource for support and connection?

Jeremy Secaur (43:33):

I think meeting other teachers through AMTA who share my outlook on teaching, who share my outlook on humanity has just made a huge difference for me. And, and having that support network -- so there's a support network of close friends who are modelers, who you know, like I tell them anything. But then also having a wider network of people in AMTA who, I know that these people are really good with standards-based grading. I know that this person has done a whole lot of work on on gender in physics. And I know that this person has done a lot of __, and so just knowing a lot of people who I know have really dug into and thought a lot about the things that I care about this wider network of teachers in AMTA, then I can turn to those people as resources. And so, through AMTA through the AMTA discord, through Twitter, I can be connected with teachers who really understand why and how. I'm looking for help on some specific things. And that's just so valuable.

Mark Royce (45:15):

That's great. Well, Jeremy, it's been awesome talking with you. I really want to thank you for sharing your perspectives. I think you've had some very valuable and informative things to share with our listeners. And so I just want to say thank you very much for the work you're doing and for the time you took to spend with me today.

Jeremy Secaur (45:38):

Sure. Thank you, Mark.

Mark Royce (45:39):

It's been good. Hope you have a wonderful rest of the season.

Jeremy Secaur (45:44):

Thanks, you too.