Science Modeling Talks

Episode 77 - "30 Years Teaching High School Science"

Guest: Lee Trampleasure

Mark Royce (01:01):

Hey, Lee, how are you doing?

Lee Trampleasure (01:03):

Good. Yourself, Mark, how's your day going?

Mark Royce (01:05):

It's going well. Thank you very much. Good. Looking forward to our conversation about modeling and all things around it. You have a really interesting background in your introduction as I was introducing you for this episode, I mentioned that you first went for a couple years to college right outta high school, and then you dropped out and it took a while for you to get back to it. And then at some point though, you decided to become a teacher. Is that correct?

Lee Trampleasure (01:36):

Yeah. Yes. Yes.

Mark Royce (01:37):

And, and then, at some point during that whole journey, you discovered modeling instruction. When was that? And where and how did that all happen for you?

Lee Trampleasure (01:49):

So, I don't know. I guess I started teaching in '93 and it took a little over 10 years. After 10 years, I actually was a little burned out in the classroom and I took a year off to work at Lawrence Hall of Science with the SEPUP program. That was a really good year. I learned a lot about building curriculum, in my mind, sort of the value of a planned tested, field-tested curriculum. I mean, I was in charge. We had a physical science, eighth grade-ish physical science program that I was in charge of. I was the one the teachers would call, the pilot test teachers would call when something wasn't working. And I remember going out to the grass with the sun absorption system and with the thermometers and trying to figure out what was going on there, why wasn't it working, why weren't they getting the right results? So I spent a year doing that. And that sort of got me set for looking at, we don't have to create the curriculum ourself. A lot of teachers feel like, I know my kids, I know my school. I have to build my own curriculum. And that really got me, opened my eyes to the value of a curriculum, a pedagogy, whatever, that is actually field tested on a whole lot of kids.

Mark Royce (03:08):

So I just wanna clarify. SEPUP.

Lee Trampleasure (03:11):

Oh, it's S-E-P-U-P. It's science. Oh God. What does it stand for? Science Education Public Understanding Program.

Mark Royce (03:21):

Okay. Okay. <laugh>. But, but, so their focus was on developing new curriculum approaches.

Lee Trampleasure (03:28):

They had mostly programs for middle school students, and they were hoping to build some high school programs. And so they had the physical science one, they had a life science one, and they wanted to bring in some more getting ready for can we prep this a little bit, ready for more freshman courses, I think the physical science piece.

Mark Royce (03:54):

So you'd been teaching for 10 years and then you took some time to work with them? Is that my understanding, yes. Okay.

Lee Trampleasure (04:01):

I had not been using their curriculum. I looked at it, I liked it. They did not have that much of a high school program set at that point. They continued to remain mostly focused on middle school, but they have developed a couple packages. Their program was kit-based science, and the idea was a lot of middle school teachers don't have that much science background. And so they wanted to have, here's the kit, here's all the parts you buy from us. You get replacements next year for the consumables, but it's all here. And again, just like the modeling instruction, they have lots of background notes for teachers. Here's what's going on, here's what you should expect to see. Here's the common misunderstandings. So that's where I really first saw the value of a program that was really designed for teachers who they may be teaching something that they don't know that much about how to teach it. They may know the content, but they may not know how to teach it.

Mark Royce (04:54):

Right. Interesting. So at this point, you'd not been introduced to modeling, or were you familiar? Okay. So, so you spent a year with SEPUP and then how, what, what happened next?

Lee Trampleasure (05:07):

So then I went back to the classroom and I taught at a Catholic school. That gave me a bit more flexibility. And at that point I had started to see a little bit about modeling. Jane Jackson would always post, there was a email list called buy share or fiz share, depending on who you were, how you pronounce it. And that was an amazing list because this was before all of our connection stuff we have now on the internet. And you could post questions to this list about what am I doing in my physics class? What's going on with this lab? And really good answers. And Jane Jackson was always on there and she was always having good answers. And then every once in a while, mentioning this modeling curriculum. And I thought, well, that sounds really good. It sounds a lot like what I did with the SEPUP program.

Lee Trampleasure (05:53):

And so eventually I got around to going down to North Carolina. So I guess that was three years back into teaching. I went to a workshop in North Carolina, and there was only like six or eight of us in the workshop. Two of us were from out of town, but everyone else was relatively local. That was in 2007. So that's where I got started. And then I came back and that was the interesting thing. In Northern California, we had a very active, the American Association of Physics Teachers, local section, very active lot, a great program for beginning teachers, helping out beginning teachers as well as twice a year annual meetings. And so I would pitch modeling once in a while. I give a little, you know, it's local section, so you can present five minutes, 10 minutes, an hour, whatever you need.

Lee Trampleasure (06:46):

And I would lead little workshops on modeling. After I went through that. What I found interesting, there was a lot of people were very anti-modeling. And I think that came from the idea of we were a bunch of converts in the early days and we're like, this is the best thing. Why is not everyone doing this? And we didn't give enough respect for teachers who were doing a really good job without modeling. Again, I still think they can do better with modeling. But it's a big challenge. And I think a lot of modeling teachers will say, your first couple years, it's like, you're starting all over again. You know, you really have to believe in it. You have to be committed to, okay, the kids are gonna wanna give the simple answer and I gotta try to figure out how to get them to think deeper. How to use their whiteboards for presenting deeper thoughts and reflections. And having that communication in the classroom. We're building the scientific community. And that's really hard to do with students 'cause they're not used to it.

Mark Royce (07:52):

So you went to, did you say South Carolina?

Lee Trampleasure (07:59):

North Carolina. So North Carolina flew all the way across the country. I was gone for a month. It was a three week workshop there. And the AAPT was having their workshop somewhere else in North Carolina, the week right before or after. So I had a month in North Carolina. Then I kept up with that. And then in four more years, I took, I went down to Arizona State. Again, Jane Jackson in those days, she was like, Hey, if you can't afford my school, wasn't gonna pay me. She's like, if you can't afford, come on down and you can take the workshop for -- it's an Arizona State workshop, if you've had a previous modeling workshop, you can join us for free. She had really cheap, she'd figured out cheap apartment to stay in nearby. So I did a couple weeks down there, did the CASTLE curriculum. Then, in 2015, came down to Cal Poly SLO and did mechanical waves. And then another couple years I finally did chemistry in Sacramento. And so I just got caught in it. It's like, I don't, I mostly tend to do mechanics. I tried CASTLE a couple times and I thought, oh, my kids were sort of math averse. I thought, let's start with CASTLE because there's not a lot of math. It's electricity. Circuits. There's not a lot of math in there. And I started with that. And

Mark Royce (09:19):

For those of us who don't know what CASTLE, tell me what CASTLE is.

Lee Trampleasure (09:22):

So CASTLE, um, it stands for Capacitor Aided Study. I can't <laugh>. Okay. It's an acronym. But basically it's using capacitors. And it's a really cool curriculum because we start with, rather than a battery that runs a constant current, we charge up the capacitor, the students charge up the capacitor, and then they can see the needle on a compass flick as the capacitor discharges. And it discharges over time. So it slows things down. It's a really great introduction to circuits and really introduction to how do we know something's going through this wire? Right. So that's what it really, and we need a continuous conducting loop. And it's a great way of getting kids to really understand. We have evidence that something's going through this wire. It's not just a light bulb lights up.

Mark Royce (10:20):

Right. So that's part of your physics. You integrate that in your physics curriculum. Yeah. Yeah. And have you been able to use that? Well, I assume you have alongside of your modeling instruction approach in the classroom.

Lee Trampleasure (10:34):

So, CASTLE was developed by, I think, Pasco or somebody else. This idea and modelers came and said, this is ideal for modeling. So now there's a whole workshop. So I attended a two-week workshop on how do we integrate CASTLE with the modeling approach.

Mark Royce (10:53):

Interesting.

Lee Trampleasure (10:53):

And very similar to what was originally produced, but just incorporating our whiteboards. Yeah. All the reflection we do in modeling.

Mark Royce (11:04):

So your first introduction in North Carolina got you excited about modeling. You started using it in the classroom. Yeah. And now you've, over the years, you've been to several modeling workshops. Yes. Yes. Which is very cool. Right. So you drank the Kool-Aid?

Lee Trampleasure (11:20):

I did <laugh>. I did <laugh>, yes. After my first one, I definitely became a convert. And I really tried to integrate everything I did and kind of when I got done with mechanics, it's like, okay, how am I gonna, now I'm two thirds of the way through the year, I gotta do this other material. And at first I would kind of do a little bit more traditional, but throwing in, you know, we, at that point, they've learned how to do paradigm labs and whiteboard sharing and all of the tools we use in modeling. So even if I went back to the book a little bit, maybe more focused on a book, it's like, okay, how do we use this? How do we adapt this in our class? So we're more modeling using those tools. Yeah. And that's where the following up with the CASTLE and the mechanical waves and the chemistry help me see, how do we... Help me strengthen that spring semester.

Mark Royce (12:13):

Yeah. So you've been using modeling for like 20 years or so. And I'm curious about what, if you were talking to some new modelers, what would be your greatest tips? What would you like, say, okay, as a modeler, you really need to understand A, B, C? What are the things that you would share?

Lee Trampleasure (12:35):

I would say the first thing is, remember, most of your students are really not used to this. And you're asking them to do things that they haven't done in their other classes, science or otherwise. Most of the other classes, really reflecting on their learning, not being told what's happening, but coming up with rules and models based upon evidence. They haven't done that a lot. And so it's new for them. And so it's gonna take them. You just, you, you gotta, you gotta believe and stick with it. And they'll start throughout the course of the year. It may take the first semester before your kids really start going, oh, now I see what's going on. And you do, every once in a while you get that little light where some kid, you know, in a, in a paradigm lab sharing, whiteboard meeting, some kid really gets it.

Lee Trampleasure (13:30):

You're like, oh my God. Yeah. They're starting to get it. So it's that, I guess that's the main thing I would say is it takes a while. They're not used to it. And it's, it's painful. If you first, when you first start modeling, you don't know what to do as a teacher. I felt like, and I think many modelers will tell you this, your first year or two, you feel like you're a new teacher all over again. Yeah. 'cause all the things you've done, you're completely doing it different. In terms of first year teachers or new modelers, one thing for new modeling teachers to remember is your school is very different than many other schools where teachers are doing modeling. Are you teaching? So I'm teaching ninth grade conceptual physics to students whose math skills aren't very strong. That's very different than somebody who's teaching 11th or 12th grade physics, the sort of the traditional way.

Lee Trampleasure (14:31):

So modeling has done a good job of looking at how do we do physics first classrooms? So if you go to a workshop, if

you go to, if you're looking online, you know, for some support through the various platforms, remember to keep in mind who is answering this question. 'cause I see a lot of times I'll post something and people just don't get, they're the traditional teacher. They're teaching 11th, 12th graders who, who've gone through so much more math than my ninth graders. And oftentimes they're not, they're taking it because they're college bound or because they're interested in it, as opposed to a ninth grader where everybody's taking it. I got everybody in there. And I love, I love teaching physics first because kids are building their math skills at the same time that they're building their physics skills. And I think we help the math classes with physics first.

Lee Trampleasure (15:29):

So that's what I would say to teachers is remember to look for somebody who gives you advice, maybe giving you advice for a different classroom, a different school culture, and to really look at, so to check in with, check in with teachers at your school who are being creative. Check in with math teachers, other science teachers. What are we doing here? What can I expect from my kids? And what's worked for you at this school? And if you've been at that school for a while, you kind of know what the school culture is. So I guess that's the piece keeping in mind, we all teach at such different schools. Someone out there is teaching at the same school as you, but it's hard to find them.

Mark Royce (16:18):

Right. So I know as a part of modeling, all modelers are familiar with the idea of whiteboarding. And I know you've got experience in the classroom with leading whiteboard sessions. Tell me about your approach and what you think about whiteboarding.

Lee Trampleasure (16:35):

So when I first started doing it, sort of the model was you have everyone around in the group, and we got 30 kids in a big circle, and we got the whiteboards. And what I realized is you can't really have a conversation with 30 people because somebody has a comment they wanna make. And by the time you finally get around to that person, it was three comments, three or four or five comments ago. So I came up with the idea. I did this from, from groups I worked with in the past of doing a fishbowl where each group has one person who represents their whiteboard. So they come to the middle, they make a little circle. So now we've got seven or eight whiteboards with one person behind each. So we can actually have a conversation there where they start going, you know, now somebody points out something on another person's whiteboard, and that person's right there to answer the question.

Lee Trampleasure (17:22):

And everyone else's job is to take notes. So you sit in the back and take notes. You know, you're, you're outside of the fishbowl taking notes. And that's something that some teachers might wanna try. If you're finding you can't get good conversations with an entire 30 kids together, try a fishbowl. And usually you'll get somebody who's more willing to talk, to be the representative from that group. And I'll do that the first one or two. And I'll go, okay, now we need to rotate. Let's get someone else in here. I never try to force it. 'cause not everybody wants to talk in a group. And some teachers are like, oh, we gotta get kids used to talking. I'm like, no, we don't, but <laugh> anyway. And you know, if somebody, and then, and then if there's somebody who is like hogging the bandwidth too much, you know, afterwards you can say, Hey, you know what? You were talking a whole lot in that conversation. Next time, can you talk a little less? So it's a neat twist on the whiteboarding that I feel works well,

Mark Royce (18:24):

That's good. But I wanna clarify, the fishbowl is you have the smaller group in the middle discussing, and then the rest of your classroom is observing.

Lee Trampleasure (18:33):

Yes. They're just on the outside. And I usually say those of you in the middle, you don't need to take notes, but you need to get a copy of someone else's notes when we're done. So you out here who are taking notes, you know, the

other, say it's a class of 32, we got eight kids in the fishbowl, and 24 outside. You on the outside, you're all responsible for taking notes because you're keeping track of what happened.

Mark Royce (19:00):

Yeah. That's cool. That's a neat tip. I love that. You know, I got your name to contact for this podcast because you're pretty active in the modeling community. And, a few different people have mentioned that you should talk to Lee because he'd be really interesting to chat with. So as your involvement with the community, you know, the times are changing in the world of education and in the world, but what would you kind of see as your advice to the modeling community or the challenges that you see that need to be addressed? I mean, this is kind of a wide open question. I want you to talk about how you see the future of modeling and all that kind of stuff. So just open platform. Go for it.

Lee Trampleasure (19:59):

Well, I think the biggest challenge for the organization AMTA is we started with three-week workshops and they were all three weeks. And then some of them started to go to two weeks. And now we've got some that are one week with a one week follow up throughout the course of the year, we'll do Saturdays or whatever. And teachers aren't willing to spend as much time. I think we got those of us who understood what it was in the early days, and were willing to give up three weeks of our summer, often paying for it if our school wasn't paying for it. We got the converts and now we're working on how do we do a two-week workshop? How do we do a one-week workshop? And I really think that the value of the two- or three-week workshop cannot be-- it's immeasurable.

Lee Trampleasure (20:54):

I think it's so much the first week you're like, oh, this is cool. And then you've got the weekend and you come back and you're doing everything again, and you're really learning it that second week. The second week it starts to gel. If you get a third week, now you're really in the flow of that third week. So how do we, in a day and time when everyone expects everything to be remote. Right? So teachers just, I mean, there's so much good. I talked about the five share email list in the early days. You know, I've got Facebook groups that I'm on that, you know, if people have questions, they post up there. I did a lab with carts going from kinetic to, or going from gravitational to kinetic energy. And I was like, I'm not getting good results. And so I hit up a list and I get really good responses from people.

Lee Trampleasure (21:44):

And so how do we not lose the hands-on. You can't do science education remotely, I don't believe. You can't really, especially something as deep as modeling. So I've sort of been pushing for, I think we really gotta look at one-week workshops. So how do we do a workshop in one week that has follow-up throughout the course of the year? I co-led one way back in 2012, and we did one week at the school. And then the next week we did, how did we do that? No, we did Saturdays. So it was like coming up on a Saturday throughout the course of the year, which was great because now I'm starting to do my modeling curriculum. I'm using it in my class. Okay. I went through all those units, but now I wanna connect with other teachers. So I'm gonna come in on a Saturday and we may get half the people not show. Right. Because it didn't work for them. They didn't feel as excited by it. And I think letting go of feeling like we need to keep people all two weeks, because we're not, my understanding, we're not getting as many people coming to workshops. And COVID really changed us, right. We all learned how to, how to Zoom. And now a lot of teachers expect that.

Mark Royce (23:14):

Right. Rather than traveling and having a hotel and all that kind of stuff. Yeah.

Lee Trampleasure (23:21):

One of the things I thought, another model of it I thought would be to have local schools. So we usually break into groups. And so you got your lab group in a workshop. So at a workshop maybe there's 20 people, and so you have seven groups of three or whatever. And what if we said we're gonna lead a workshop where it's remote, but it's

school-based. So I'm in Livermore High School, so maybe I have four or five people from the Bay Area who wanna come every day to Livermore High School and do and be with three or four other teachers there. Hmm. Meanwhile, Zooming with the modeling instructor, the workshop leader, somewhere else leading three or four different pods. So you still can do, we still could do whiteboarding, we still could do sharing with our group the Paradigm Lab results. And I think something like that might get people. Yeah. And that's, I guess that's, that's my real question is how do we, how do we adjust for our post COVID Zoom world?

Mark Royce (24:32):

Yeah. That's interesting insights. And you being able to share that with some of the, the leadership at the American Modeling Teachers Association, AMTA, you know, we have new leadership. I'm pretty excited about Caroline and Ine who have taken on the roles of executive and associate executive and they're very creative and, very excited about their investment involvement with helping develop AMTA where we are. So finding ways like this forum to communicate to them and share ideas and get online and communicate and share ideas with the community of modelers, I think would be great. Do you have other insights that you think that the AMTA needs to be looking at?

Lee Trampleasure (25:36):

Well, one thing I would add is, this morning, the coffee hour, I've been attending the monthly coffee hours, almost every month. And this morning Carolyn and Ine were on there and it was, it's great. It's been great to see them. I've seen them in a few places and I do feel they bring a lot of good ideas. And I look forward to how we change because we do. That's, I think, I think we do have to change.

Mark Royce (26:01):

Yeah. What do you see as, for modelers the best ways to connect in community?

Lee Trampleasure (26:09):

Oh, I would say it's whatever platform people are comfortable with, the modeling, the list, the email list that's been around forever. That's a really good one. Lots of good comments there. Although I think that's not as, not as used these days, but there's Facebook groups, blue, whatever you're on, you kind of gotta look and find, how to integrate it. And people say, I don't do Facebook anymore because too many ads, too many whatever. And I'm like, okay, learn how to find the modeling instruction mechanics or whichever group you're interested in on Facebook. Find that group. Go to that homepage, bookmark that homepage. Now you're not going to your wall anymore. You're going to that page. You're only seeing comments about that group, 'cause there's really good discussion there. But we get burned out by the ads by, you know, they gotta make money on us. You know, it's free. But they gotta keep the platform running. So I guess find your favorite platform. Look around. If nobody is on your platform, ask on other platforms. Hey, does anybody know if there's a group on Blue Sky or group on wherever that I can connect with and ask questions too?

Mark Royce (27:33):

Yeah. Here's a suggestion is that I know that the AMTA has a, I don't know if it's weekly or, but some regular newsletter that goes out. And I know that in the newsletter there's a lot of information about what's going on with AMTA and also suggestions for community development and connection. So if you don't get the newsletter, I would recommend that you do, and I assume, I should check this out, but I assume you can find it and how to get connected with it via the modeling instruction.org. Yes. Modeling instruction.org website and find out more about ways to connect and get involved.

Lee Trampleasure (28:26):

And that's a good thought. It just occurred to me on the website, we should have, here's a link to all of the groups. So here's the Facebook groups that are modeling specific. Here's the Blue Sky groups that are modeling specific. So when someone goes there, they can identify their platform.

Mark Royce (28:44):

Yeah. That's, that's a great idea. If it's not happening

Lee Trampleasure (28:47):

Because, you're right. It's how do we get connected? How do we find people to connect with?

Mark Royce (28:51):

Right. I know, and I don't know how, I hope, I'm not speaking out of school here, but <laugh>, but I know that there is work going on behind the scenes to develop a brand new AMTA website. That is going to incorporate more of that kind of a thing. And they're gonna have more opportunity for easier connection with modeling members, you know, the people who have joined the community as a member. So it's pretty exciting what's happening, what I'm aware of. And I know in the coming days there will be more information that people will be led to.

Lee Trampleasure (29:34):

If the modeling instruction.org website could have, here's all the groups we think you should join.

Mark Royce (29:42):

Like an aggregate.

Lee Trampleasure (29:44):

Yeah, yeah, yeah. And somebody says, Hey, I have this great, you know, I'm on, I'm on X and there's this great group on X and let's put a link to that. So there'd be a way that people could submit to AMTA and say, here's a cool group I think people should know about. 'cause it's modeling, it's modeling focused.

Mark Royce (30:02):

Yeah. That's a that's great. That would be great. Maybe Caroline and Ine will hear this and help make that happen. That would be great. Yeah.

Lee Trampleasure (30:14):

I do look forward to both the new public-facing website and the new member website I think are both gonna be great.

Mark Royce (30:22):

Yeah.

Lee Trampleasure (30:23):

Both of them have been getting a little old.

Mark Royce (30:27):

And that's the thing, you know, things change and so Right, right. Over time it's good. Well, you know, I happen to know also 'cause of, when I looked at your website and some stuff, you are involved with leading some hiking groups, you know, like exploring? I don't know. Tell tell me about, tell me about what you're doing there. Not related to modeling so much, but...

Lee Trampleasure (30:56):

There's a platform called, called Meet up.com. And it's any kind of group you could think about: hiking groups,

dinner party groups, knitting groups, book clubs. It's just a platform where people can make a group. And so I was turning 50 and I'm like, I gotta get some exercise. So I started going on their hikes with different groups and all the hikes were like, death marches, you know, we're gonna get in our eight miles and we're gonna get it in as fast as we can <laugh>. And when the last person gets to the place where we're waiting for everyone to catch up, we're taking off rather than waiting for that person who's going slow. So they make it really easy to start a group. And I start a group in San Francisco Bay Area, focused on geology and natural sciences. And so I do, I lead usually about one a month.

Lee Trampleasure (31:45):

And it's just a really neat group of people. Because it's a hiking group with a science focus, it gets really fascinating people coming out for hikes. And we get five to 25, usually. Somewhere in the first year, someone said, oh, we should do a road trip. So we have a pretty much an annual trip to Death Valley in December, where we do three days of hiking around Death Valley, three or four days of hiking around Death Valley. And I've sort of figured out here's the good hikes. And every year I do a few different ones. There's a couple we do every year. 'cause you gotta go to the lowest place in the US right? So that's been really neat. And sort of, science education. And I think every once in a while I tell them, Hey, if you wanna donate some money, here's modeling. AMTA, you can donate money there.

Mark Royce (32:36):

There you go.

Lee Trampleasure (32:36):

So I do a pitch every once in a while because it is a good group of people. But yeah, that was just something I started doing on the side. And I get my exercise and as I tell 'em, I like leading the group because I can't wake up in the morning and go, ah, I don't feel like hiking today and stay in bed. <laugh>, I gotta go. Because depending on--

Mark Royce (32:56):

Motivation.

Lee Trampleasure (32:57):

Yes. Yes.

Mark Royce (32:58):

So how would somebody, if they were interested listening to this, wants to find out more about your hikes and stuff, is there a way for people to connect?

Lee Trampleasure (33:06):

Well, probably the easiest way, I mean, you can google Geology hiking San Francisco, and I bet it'll come up. Um, or if you go to trampleasure.net, I've got a bunch of links up there. I've got a whole geology dot trampleasure.net is where I, I put information about our hikes.

Mark Royce (33:23):

So that's your website? T-R-A-M-P-L-E-A-S-U-R-E net. Yeah. Oh, cool.

Lee Trampleasure (33:31):

And on that site, there's not much on that site, but there's links to my other subdomain sites where I've got a teaching, I can't remember. I call it science teaching dot trampleasure.net or Teaching science dot... Anyway, I've got, so

I've got, I started with just a website and I started adding a whole bunch of things and I realized I wanna put all of my science education stuff in one spot. So I made a subdomain with that. So if you go to trampleasure.net, you'll see all links to all of those things.

Mark Royce (33:57):

Well, Lee, gosh, it's been awesome talking with you, and I'm very glad that we got connected, and it's very nice to meet you. We're in California. Maybe, who knows, our paths will cross someday. That would be fun.

Lee Trampleasure (34:11):

Someday, we might, yes. No, it's been great. Mark. Thank you for the talk.

Mark Royce (34:14):

It's been my pleasure. Now, have you retired yet?

Lee Trampleasure (34:18):

I retired once, two years ago, <laugh>, I came back to work a year ago.

Mark Royce (34:24):

Um, okay.

Lee Trampleasure (34:25):

It got us back from Florida and it's helping my retirement, my pension. Yeah. So now I think I have another 18 months. Yeah. And I got another year and a half, and then I'll be retired again, round two.

Mark Royce (34:36):

Well, gosh, best of all the luck to you, man. Thank you. We appreciate your contribution to what's happening with our kids and education and what you're bringing to the modeling community. We're grateful for that. You take care of yourself.

Lee Trampleasure (34:53):

All right. You too, Mark. Bye-bye.