



Science Modeling Talks

Episode 76 - "AMTA's New XO"

Guest: Caroline Savio-Ramos

Mark Royce (01:56):

Well, hi Caroline. How are you doing today?

Caroline Savio-Ramos (01:59):

Hi, Mark. I'm doing well. Thank you,

Mark Royce (02:01):

Awesome. I'm very excited to talk to you. We're excited about the new role that you've taken on, and we're looking forward to what you have to share. So, uh, thank you. Let's, let's just dig into this and get this conversation going. I first want to ask you about what first led you to the modeling instruction ideologies and how'd you get introduced to modeling?

Caroline Savio-Ramos (02:28):

Sure. So, well, I guess I'll answer that by giving you a brief overview of my background. So I became a teacher in, around the early, mid two thousands. And I was a physics teacher in New Jersey, and I mostly taught for the Newark Public school system. And, in 2011, I decided to move cross country to Arizona. I was accepted into their PhD program in educational technology. So, ed tech has always been something that I really found interesting. So while I was there, I met Colleen. Colleen worked in the same lab where I was working, and we had collaborated on a project--it was around physics education, how to teach kids certain topics in physics using different forms of technology.

Mark Royce (03:26):

You know what, I wanna just clarify, that's Colleen

Caroline Savio-Ramos (03:29):

McGowan Romanowitz. Yes. Yeah. Yes. Yeah. So, I remember one day we were out to lunch and she asked me if I knew what modeling instruction was. We were there with another professor, and they were asking me about my background and teaching physics. So, you know, while I was at ASU, I had the chance to run a bunch of studies in the world of physics education. And then when I graduated, I graduated in December, 2015. I defended my dissertation shortly before that, and I went to go work in tech for a little bit. I worked in the Silicon Valley. I worked for Hewlett Packard. And while I was doing my PhD, I also worked a little bit at Intel in Chandler, Arizona. And while that was a great experience, I always missed teaching.

Caroline Savio-Ramos (04:23):

So in 2018, this coincided with a move to Atlanta, and I decided to go back to the classroom. And I went to go work at an independent school where they used modeling. And I should say that while I was in corporate America, I

joined the AMTA, and then I became a lifetime member. And I used to always go to physics teacher PD, even though I wasn't in the classroom. So I joined the Northern California Nevada section of the AAPT, and I used to go to the physics teacher SOS meetings, P-T-S-O-S. And I remember introducing myself and I told 'em a little bit about me, and I'm like, oh, I'm thinking about going back into the classroom. And I remember somebody said, do it, do it. And they were kind of like, just chanting, do it. Do it.

Caroline Savio-Ramos (05:15):

So I did. And with that, 'cause I remember telling them a little bit about modeling. So I went back into the classroom 2018, and that's when I got the chance to use modeling instruction. I started going to the summer workshops. I went to 2018, Birmingham with Tim Burgess. Then I went 2019, Jeff Steiner. And then I did a couple more, astronomy was a distance learning. I did another waves with that. So, that's basically how I got into modeling. I met Colleen and I had the chance to go back into the classroom and finally do it <laugh>. Do the whiteboarding, do the modeling.

Mark Royce (05:58):

So Colleen was really the one who got you focused on the modeling trail?

Caroline Savio-Ramos (06:04):

Yes. And she has always been like a mentor to me. So we kept in touch all these years. And yes, it was because of her that I got introduced to modeling and I'm here today, <laugh>.

Mark Royce (06:16):

She's awesome.

Caroline Savio-Ramos (06:16):

Yes.

Mark Royce (06:17):

So how would you say that your introduction to modeling influenced your career over the years?

Caroline Savio-Ramos (06:26):

It definitely changed the way I taught and approached physics. You know, the whole thing with whiteboarding, that was the first time in my career that I had a hundred percent engagement in my classroom. The kids really enjoyed that. I'm not going to say it was easy to quickly adapt to it, because anytime you're asked to change or do something different, especially in the world of education, teachers will struggle with it. So one day, I remember in the middle of it, I think it must have been in the first year I was using modeling around October, it suddenly clicked, oh, this is why we're doing this. Okay. Like, I just remember that moment. It just made sense. Like, so why do we do a lab first? Why do we have a paradigm lab? You know, why is it that we need to show things in different representations? How do they tie in together? So once that made sense, I think that also helped with getting the kids to draw those connections. But I had to change basically the way I approached and taught.

Mark Royce (07:34):

What would you say when it comes to being in the classroom and applying what you know about modeling, what would you say are kinda like the areas that you love and are your specialties?

Caroline Savio-Ramos (07:46):

Definitely, the whiteboarding bit and getting kids to buy in and get them to start talking. They love whiteboarding,

and it's easy to have them do the different representations on there and get them to talk about it. I would say that's probably the strongest. It also encourages kids who are normally quiet. Especially girls, they tend to not want to share or talk as much, so whiteboarding definitely helps with that.

Mark Royce (08:28):

Well, for those who don't know about whiteboarding, why don't you describe it a little bit for anyone who might be listening that's not really familiar with the process?

Caroline Savio-Ramos (08:37):

Sure. So, I use whiteboards that are, roughly, I guess I would say two feet by three feet in dimension. And I have maybe three, sometimes four kids, per board. And maybe, we'll do, for example, a lab, and I'll ask them to share out, it doesn't even have to be a lab. It could be any, any activity we did. And, the kids start, we have certain guidelines, like you need, you need a descriptive title. So the kids get creative. You need, because they have to present this, it's not like we're just drawing a whiteboard. So on this two by three whiteboard, they're going to write their ideas, they're going to prepare their thoughts in an organized manner, draw what comes to mind. Usually what I do is I have them present. They come to the front of the room.

Caroline Savio-Ramos (09:33):

I have like one of those art easel things. And, you know, they introduce themselves, hi, my name is, you know, Johnny <laugh>, and this is, you know, they, they each introduce themselves and then they each take turns talking about the whiteboard. And I have a couple of rules and norms. You know, we have to have good audience etiquette. Everyone has to have contributed to the board. And then at the end, when they're done presenting, they say, do you have any questions? And they pause, look around the room, people start asking questions. And then at the end when they're done, you know, rather than have everyone clapping, we do 3, 2, 1, and everybody just claps once. And then the next group comes up, if we're pressed for time, I have the kids do what's called a gallery walk. So they'll put their whiteboards around the room making kind of like a circle, and they'll walk around from board to board, and they'll look at each other's board and talk about, oh, why is my answer different from theirs? Or why are our answers so similar? So that always sparks discussion as well. And it's a little faster than having each group present, because that usually takes an entire class period by itself.

Mark Royce (10:52):

So a group of kids works on one whiteboard.

Caroline Savio-Ramos (10:55):

Yes. Yes.

Mark Royce (10:56):

And they're exploring on the whiteboard some concept that you've been teaching.

Caroline Savio-Ramos (11:02):

Yes. Or they're writing up their findings for a lab or something like that. Yes.

Mark Royce (11:07):

Well, I am excited to talk to you a little bit about your role. At the AMTA, at American Modeling Teachers Association. So first of all, how'd you get connected with the idea of applying?

Caroline Savio-Ramos (11:24):

I did see the announcements go out on the listserv, and then I guess Colleen reached out to me and also told me, Hey, you know, we have these openings and would you be interested? And, I was actually not in the classroom this year. So I decided, Hey, I'm gonna, I'm gonna go for it. So I did. And so far it's been great.

Mark Royce (11:54):

<laugh>. Yeah. You've been there a month now?

Caroline Savio-Ramos (11:57):

I've been there a month, yes. Very, very busy. Busy month. I'm learning so much. I've learned so much about, not teaching-related things, but, I guess in a way, running a company type of thing, wearing all the different hats. What it is to run a nonprofit. You know, it's been a great learning experience and I've learned so much because a lot of this is just very new to me.

Mark Royce (12:25):

The people I've talked to who are connected, are very excited about your leadership already and are very impressed with the, the way you've hit the ground running. Tell me, what are kind of some of the top things that you're looking at right now? What, what has this month been like? You know, you said you've learned a lot. Well, tell us a little bit about some of those things and what's on your plate.

Caroline Savio-Ramos (12:50):

So one of the biggest things is I've connected with a lot of school districts, people higher up who are interested in bringing modeling instruction to their school. And so I had the chance to talk to a lot of those folks and get an insight into, for example, what does it mean to bring a program to a school? What does that entail? Because as a teacher, you know, I often wondered, particularly here in Georgia where modeling isn't as big as in other states. I always wondered what would it take to bring this to the school? You know, because this has to go several levels up. So speaking to those folks has been very, very interesting. I've learned a lot from that. What does it take to host a workshop? Finding leaders, all the logistics, things like that.

Mark Royce (13:42):

The educators that you've talked to, I assume administrators, did they find you and reach out, or is this something that you've reached out to them?

Caroline Savio-Ramos (13:54):

Most of them have reached out to us, and I guess I should clarify and say, it was both teachers and administrators that are reaching out to us. Most of them reached out to us. I am also in the process of reaching out to people and seeing if they would be interested. Especially people who've ran workshops in the past a few years ago, and maybe they didn't last year for whatever reason. So I think in that sense, it goes both ways. One of the biggest hats I've been wearing is the IT hat. So trying to set us up with like a good workspace that we can have learning about, like system administration, what does it mean to migrate emails and get these things, these processes set up and up and running, you know? And that area is like right up my alley too, since I'm like a tech person. So that's another thing I learned. So,

Mark Royce (14:53):

So that's-- you're focusing on internal communications,

Caroline Savio-Ramos (14:58):

Internal and external. Right now I'm doing everything. So, yes. Yes. I'm doing a little bit of everything. I need to get into fundraising. I began looking into the logistics for that, how to go out and find people. So it's a little bit of everything, the operational part. And I'm trying to think. There was something else that was very, ah, yes, we need to migrate to a new CRM, from web life, eWebLife, we need to migrate to Wild Apricot. And so I am learning that platform. I'm using some of my data science skills, exporting all the data. I need to clean it up, a huge data set with tens of thousands of rows, and get that ready to upload to our new system so that we can have something functional soon.

Caroline Savio-Ramos (15:57):

And then at the same time, fielding questions over email. A lot of people have questions about curriculum. Where can I find this? Where can I find that? Just learning a lot about what it means to, like the legal parts of having a nonprofit and, you know, what the role of my, what my role is, with respect to the board and, and things like that. So this is all very, very new to me, and I'm learning a lot <laugh>. So yeah, it's been a great challenge so far.

Mark Royce (16:29):

That's wonderful that you're tackling it like that. CRM is content. Remind me, CRM the term...

Caroline Savio-Ramos (16:38):

Customer Relationship Management System

Mark Royce (16:41):

Is that primarily an online presence?

Caroline Savio-Ramos (16:44):

Yes. It's where our member database is held. It's where all our content, like when people need to download, like the chemistry or physics, biology curriculum, like, after attending a workshop, it's there. It's where people sign up for events like our webinars, our distance learning courses, coffee hours, things like that.

Mark Royce (17:10):

Is it focused primarily on membership? People who are modeling teachers already? Yes. Yes. Okay. Okay. So it's giving them more resources. Resourcing them. Correct. Cool. What about the public facing --, I know that the American Modeling Teachers Association needs to have a presence for connecting with people who are curious. Yes. And, you know, is that part of it too, or is it,

Caroline Savio-Ramos (17:41):

So I would say that's, my colleague Ine, she's been working a lot on the social media part. So trying to get the word out, and updating all that. But, we do have a website, modeling instruction.org, and that's powered by WordPress, but that doesn't necessarily have to be on our CRM. We have that hosted separately. But yes, I anticipate eventually changes in the layout will come to that, but that's our public facing part, is our website and then our social media.

Mark Royce (18:20):

So talk to me a little bit about, kind of, as you're getting into this, I know it's early, but talk to us a little bit about your vision. Vision cast a little bit with our listeners and say, here's where I'd love to see us going. These are some areas that I would love to see us develop or accomplishments that you hope for.

Caroline Savio-Ramos (18:42):

So, the immediate one is let's get more summer workshops up and running. I would like to do a lot of outreach to members, maybe get coffee hours a little bit more active, maybe get our social media sites a little bit more active. But, I think engaging with members and getting more workshops up and running, I think those are two of the top priorities in terms of what can we do for our members type of thing. That's cool. And I think, let's see, challenges, well the challenges are more, just the internal things like moving all our stuff over into the new CRM, because then people have to learn a new platform, we'll have to teach people how to log in and things like that.

Mark Royce (19:45):

Is there a reason that you're creating an entirely new environment for the customer relations?

Caroline Savio-Ramos (19:53):

The reason why we're migrating to a new platform is because, eWebLife is going outta business. So they gave us a couple months' notice. So we have to do that. We have to go over to the new platform.

Mark Royce (20:09):

Okay. And you mentioned it a Wild,

Caroline Savio-Ramos (20:12):

Wild Apricot. Yes.

Mark Royce (20:13):

Wild Apricot. Okay. Interesting name.

Caroline Savio-Ramos (20:16):

So the way to connect to that will continue being through the website. So there's a big button on the landing page that says, existing members log in here. So the next time they... In a few months. We'll send out an announcement, but it's the same way, click on that big button. But instead of eWebLife, they'll be directed to Wild Apricot

Mark Royce (20:36):

eWebLife is going out of business. Yes. So they can no longer support the needs. Correct. And what are some of the things about wild Apricot that you're very excited about? I mean, you chose it for a reason.

Caroline Savio-Ramos (20:51):

Yes, because from what I understand, a lot of different CRMs were looked at, and we settled on Wild Apricot. I guess a combination of cost and user experience. And from what I can tell, it's a lot cleaner. The interface is a lot cleaner. It's faster, too.

Mark Royce (21:14):

That's good. <laugh>.

Caroline Savio-Ramos (21:15):

Yes. It's cleaner, faster, more modern. So I think it'll be easier to find things, it'll be easier to register and sign up, and if anybody wants to become a member or make donations, like things like, that just becomes a lot easier.

Mark Royce (21:31):

As the XO you're in charge of all this administrative responsibility and you're, you know, promoting the organization and you're doing all that kind of stuff. But I think one thing that comes with that role is also you're kind of an ambassador. So what would you say to someone-- kinda give me your pitch on how you would approach somebody who's interested in modeling and is new to the idea, and kind of how would you advise them? What would you do to entice them to get involved with the modeling world?

Caroline Savio-Ramos (22:15):

We kind of had that situation where a couple of administrators reached out to us and they wanted to know, they heard about modeling. They told us they were in the middle of quote unquote picking a curriculum. So, they were under the impression that modeling was a curriculum. And so what we did is when we met with them on Zoom, I have pictures of-- I love taking pictures. When I was a teacher, I took pictures of my kids in action and stuff like that. So I showed them what a modeling classroom looks like, and I showed them whiteboarding and I showed them pictures from when I took Jeff Steiner's mechanics workshop in 2019, I had pictures from that. 'cause I'm like, then this is what it looks like when teachers take workshops. And they were really intrigued and they said, so this sounds like something that can sit either on top or underneath whatever curriculum they chose and I'm like, yes, because this is a pedagogy. So I think that having pictures or something visual really helps a lot and there's a lot of buzz out there about building thinking classrooms. You know, how people are writing on, whenever you say whiteboarding, that's what that brings up, how people write their ideas. And so that's, somebody even brought that up and I said, sure. Yes. You can think of it that way. They're very compatible. So when people are interested, I definitely send them pictures. So what we're trying to prepare are, something like a pitch deck where we have like a little or one page or something where they can see pictures, visual, like, oh. And, and, and think to themselves, oh, this is something I wanna try. Oh, this looks really cool. Especially people who have never seen that before.

Mark Royce (24:03):

Yeah. So,

Caroline Savio-Ramos (24:04):

So that's why I think the social media part is really important because like, I know on Blue Sky, a lot of people like to post pictures of what they do in their classroom and, and it's things like that that really hook people, I think.

Mark Royce (24:18):

Yeah. It sounds like something that maybe, you could take that pitch even through the use of a pitch deck type of thing and have an online access for people say, go here and check this out. And, and they could go online and look at your pictures and maybe there's some, you talking about it or you know, something like that would be really cool.

Caroline Savio-Ramos (24:44):

Or maybe a video. Yeah.

Mark Royce (24:46):

That would be cool. Are you, are you meeting a lot of modelers?

Caroline Savio-Ramos (24:52):

We had a town hall last night, which I felt went very well. I got to see people I haven't seen in years. I got to meet new modelers and people that I only know online. But I guess I anticipate that in this role, yes, I will meet a lot of people, a lot more, which I'm excited about because it's always cool to see what people in different classrooms and different states do.

Mark Royce (25:19):

Yep. It's exciting. Mm-hmm

Caroline Savio-Ramos (25:21):

Yeah, I think that, oh, I encourage people to come to the town halls, come to webinars because the way I wanted to approach this is have an open conversation with folks. Like, what do you want to see? What can we do for you? What are some things that you would like AMTA to offer that we possibly don't? So we have a couple of things on the horizon, some ideas. One of them is after people take workshops, for example, maybe offering asynchronous distance learning courses where they can brush up on difficult topics like electricity and magnetism. Maybe in chemistry, nuclear chemistry, you know, something like that. So, you know, what about leaning into computational physics? Because programming is really important. And I say this as I was also a computer science teacher, and, um there's a big push for that.

Caroline Savio-Ramos (26:24):

And it would be nice to have programming side by side with physics. So, if we can really, and I know we have a computational physics first workshop and things like that, but if we could really get that out there to folks, for example, I think that would be good. And what else, what do people want? I know that at the town hall yesterday, an idea that was very popular was getting together to revamp the curriculum. You know, let's introduce new resources. Let's bring things up to date. Especially since, you know, today we have AI. AI is here, it's here to stay. And how can we use AI? Maybe not in teaching, but maybe we can take, we can use AI to modelize old curriculum, you know? 'cause that's a lot of work taking things that maybe you used 20 years ago and trying to change it up to date. But I found that with AI, it doesn't, you can have it do it for you very, very quickly. And sure if it makes mistakes, it's easier to spot mistakes than start from scratch. So, I don't know, just ideas like that that came up. So if this is of interest to anybody, please let us know. We want to have these conversations and have a place for people to give us their thoughts.

Mark Royce (27:44):

How would people do that? Share with us how people would get in communication with you and connect.

Caroline Savio-Ramos (27:53):

So, aside from coming to town halls and webinars, I think one of the,

Mark Royce (28:00):

I wanna ask you about town halls. How do people know about them when they happen, and how are they gonna get informed?

Caroline Savio-Ramos (28:06):

So, right now, while we still have eWebLife, they're there on the calendar. But what I did was, for instance, for the Leaders' Town hall, I went on the listserv and I sent out a couple of email blasts to the leaders telling them to sign up, pointing them to the link. So in addition to it being located on our CRM, I will use the listserv to send out announcements and then we should probably post it on social media as well. Like, you know, okay, well we're gonna have a coffee hour today, or we'll have this webinar coming up. Please join us, and provide the link. And then when they sign up, send that Zoom link out to people. Things like that.

Mark Royce (28:56):

I know you guys have a newsletter.

Caroline Savio-Ramos (28:58):

We have a newsletter, yes.

Mark Royce (29:00):

How often does it go out?

Caroline Savio-Ramos (29:02):

I think the newsletter goes out once a month. We can advertise it in the newsletter and tell them where to go.

Mark Royce (29:09):

And to get the newsletter, they can sign up, like on the website or to

Caroline Savio-Ramos (29:13):

Get the newsletter, email engage@modelinginstruction.org and Ine can help get you set up.

Mark Royce (29:22):

Yeah. Okay.

Caroline Savio-Ramos (29:23):

And then I feel like we need to have like a space for people to provide suggestions. What that's gonna look like, whether it's a form or something, I'm not sure... To be determined, but I feel that that would be, we need that kind of space. Yeah.

Mark Royce (29:37):

Yeah. There's a lot to do.

Caroline Savio-Ramos (29:40):

There is <laugh>. There is. I certainly have my work cut out for me. We all do. We all have our work cut out for us.

Mark Royce (29:47):

Now you've mentioned Ine couple of times in our conversation here, and people may not be at all familiar with that name. Can you tell us a little bit about Ine, who she is?

Caroline Savio-Ramos (30:00):

Ine is our associate executive officer. So we were both brought on at the same time and she and I work closely with all things AMTA, getting things up and up and running. So we split tasks between, you know, communication, membership, CRM stuff, tech stuff, things like that.

Mark Royce (30:26):

Yeah. I'll have to do an interview with Ine at one of these times.

Caroline Savio-Ramos (30:30):

Definitely. Yeah.

Mark Royce (30:33):

Do you wanna share your email?

Caroline Savio-Ramos (30:38):

Yes. I's amtaexec@modelinginstruction.org.

Mark Royce (30:46):

Okay. amtaExec at Modeling instruction.org.

Caroline Savio-Ramos (30:52):

Correct. You can also go to the website: modeling instruction.org, and you could find me there, I think it's in the About Us section. Look for the board and the staff, and you'll see a link to contact us there. And I think my email should be on there.

Mark Royce (31:10):

Caroline. I've really enjoyed chatting with you.

Caroline Savio-Ramos (31:13):

Thank you. Likewise.

Mark Royce (31:14):

I wanna thank you for taking the time to do it. It's early and we're excited to watch the developments as they come along under your leadership. Thank you, <laugh>. I'm really excited about what the future holds. Thank you so much for being here today. I appreciate it.

Caroline Savio-Ramos (31:35):

Absolutely. All right.

Mark Royce (31:36):

You take care.

Caroline Savio-Ramos (31:37):

Take care. Bye-Bye.