

Marilyn Dieppa (00:01):

I think my favorite thing is their success. Whether it's robotics, whether it's in the classroom, that they pass a test for the first time, those are my moments of success. And that's what makes me happy.

Eric Cross (00:15):

Marilyn Dieppa is a veteran middle-school science educator at Miami-Dade County public schools. Dieppa launched her school's STEM Academy in 2016 and developed professional development through the STEM Transformation Institute of Florida International University. Dieppa's coached numerous new teachers and was the 2018 Miami-Dade County public schools' middle-school Science Teacher of the Year. In this episode, we discussed her transition from a career in journalism to the science classroom and the value of personal and professional support systems for teacher longevity. And now, please enjoy my conversation with Marilyn Dieppa.

Marilyn Dieppa (00:52):

Nice to meet you, Eric.

Eric Cross (00:53):

Nice to meet you too. Thank you for being willing to come on the podcast.

Marilyn Dieppa (00:58):

Not a problem.

Eric Cross (00:59):

So you're out in, you're out in Florida. In Dade County. I'm out here in San Diego. So I'm like literally on the other side of the country. Have you—were you born and raised in Florida?

Marilyn Dieppa (01:09):

I've been here for 40 years, so I've been here most of my life. Yeah. I'm Puerto Rican, but I was, you know, my young childhood, I was in New Jersey. And then when I was 15, I came down.

Eric Cross (01:23):

I looked at like your—some of your accolades, which are really impressive. The things that you've done for students with robotics, and all the education, or, kind of like teacher enrichment, a lot of mentoring and coaching that you do now.

Marilyn Dieppa (01:35):

I am part of leadership team for the district. I do a lot of training. I work on curriculum. I help with pacing guides to make sure that everything is based on what the state wants, what the district wants. I have done a lot for the district in the last, probably 20 years.

Eric Cross (01:52):

What got you into teaching initially? What was your...like, why middle school science? We're like a unique group.

Marilyn Dieppa (01:57):

This is the second career choice for me. So I've only been doing this for 24 years. I was a journalism major and then I got married and then I had my child and I wanted to do something. My thing was that I wanted to go to Iraq. I wanted to cover the news. I have a minor in Middle Eastern culture. so there was a lot of things that were in my mind when I was young, pre-married. and after, you know, you have children, priorities kind of change. So I totally changed, pretty much had to start from scratch, with my degree, because nothing kind of transferred over from journalism to teaching. So before I actually did that, I started subbing just to see if I liked it. And I fell in love with teaching right away. And that's how I got into it. So my degree is really in elementary.

Eric Cross (02:45):

Now, when you were subbing, you were doing elementary school.

Marilyn Dieppa (02:47):

Yes. Pretty much elementary.

Eric Cross (02:48):

How did you go from there to like, middle-school science?

Marilyn Dieppa (02:50):

My thing was writing, not necessarily math and science. But I ended up with my cooperating teacher, my CT, she was a math and science teacher. So I was put with her, and who knew that I liked science and I liked math? So I ended up with that and I infused a lot of labs. So in elementary you tend to—I think teachers are a little bit afraid of the labs, so I infused a lot of literature with my labs. I infused all my—I did it like a whole-group type thing, everything I did with my labs, I incorporated the math. I incorporated the science. I incorporated, you know, the reading with it. And from there, I just—you know, they ended up putting me in a lot of leadership roles with science. And then my principal was opening up the school where I'm at now, my former principal. And she, you know, she took me with her. And so her dissertation was in looping, on how following your students, did that really make a difference in test scores? So I was part of her like test study, and I had students that I followed for two years in a row. And she would look at data and that was part of her dissertation. So that really made a difference. So I ended up moving with my students and my first group of middle-school students, I had them for four years.

Eric Cross (04:10):

Oh, wow.

Marilyn Dieppa (04:10):

And that was—those were my children. I, like, boohooed when they left. And I ended up, you know, literally following them from fourth grade all the way to more than four years. Because it was all the way until they left eighth grade.

Eric Cross (04:21):

What did you think of that model of looping with students?

Marilyn Dieppa (04:24):

I think it's a great model, depending on the kids that you have. I love, you know, the school that I'm at. I'm very blessed, because it's a great school. It's really a wonderful school. I've had really good relationships with students. They always come back, and they always come back when they wanna tell me that they're in something in science, right? They're an engineer or they're a nurse, or they're, you know, doctors at this point. So I've seen a little bit of everything with my students. And it's very rewarding.

Eric Cross (04:52):

That's super-exciting, right? When they come back and they're either telling you about their college major or what career they're in. And I like to recruit them at that point and ask them to come talk to my students. Because Google photos gives you unlimited storage, if you have a teacher account, I actually have photos of students from like 10 years ago.

Marilyn Dieppa (05:09):

Oh, wow.

Eric Cross (05:10):

And I'll put their middle school picture next to their—and then their current picture.

Marilyn Dieppa (05:14):

Oh, that's awesome. I've never done that.

Eric Cross (05:17):

Yeah. You could see, like, they could see the younger version of them.

Marilyn Dieppa (05:19):

And it's funny because even with the STEM Academy, which I have now, I have the same group of kids for three years. So I've had already few groups that have gone by, and those kids come back to me, they come back to our competitions, they help out, you know, they're very integrated with the robotics. So I'm getting those students back as well. So I've maintained that relationship with them as well.

Eric Cross (05:46):

How do you develop your own classroom management style? How did you figure out where your—where you fit and what works for you? What was your process like for that?

Marilyn Dieppa (05:55):

You know what I think, just by teaching, teaching them to respect. And one thing that I've developed that—I don't scream in my classroom; I just talk to the kids. I have very good one-on-one communication with them. I show them respect. I treat them as an equal.

Eric Cross (06:12):

And what grade are you teaching currently?

Marilyn Dieppa (06:14):

Eighth grade. So I do science. I teach high school science. I teach comprehensive, which is like our regular students. I have kids who are inclusion. I have kids that are ESL. So I teach all, you know, dynamics of students. And then I have the academy, which is something separate. But I infuse a lot of physics and of course that they need in order for them to be competitive.

Eric Cross (06:38):

So tell me about that. What is the STEM Academy?

Marilyn Dieppa (06:40):

It is an enrichment program. So it is an advanced enrichment program, because they do follow like the math enrichment. so they have to be really good at math in order for them to be accepted into the program. So, one day we got like a grant, and we got a little robot, the VEX. I don't know if you're familiar with VEX. I know it's big in California. So I was told, "Here, this is for you. See what you can do with it." So I started with an after-school club, the following year. It kind of hit off. We went to our first little competition. The kids did really well. And then the following year, they told me, "Hey, we need an academy, make it happen." So it's not like I had a curriculum. I kind of do my own thing. But we do a lot of different types of things. Our big portion is the VEX, but I also do sec me, we do Future City. We do a whole bunch of competitions within the district. You know, Math Bowl. So I get my kids prepared for anything that really has to do competitive-based. I do that with those students.

Eric Cross (07:38):

What age range or which grade range?

Marilyn Dieppa (07:40):

Sixth to eighth. We have kids who stay the three years and then we have kids that after, you know, sometimes it's more the parents that want them to be part of the engineering. but sometimes we lose kids after the first year and you know, that's fine because we wanna really have kids who really wanna be there and are, you know, committed to it. Because there's a lot of commitments to that program.

Eric Cross (08:01):

Those types of programs, there's so many like outside-of-the-classroom things that you need to take care of. If you're going to competitions, and weekends, and all those types of things. Is there a team of teachers that are doing this or is it just you?

Marilyn Dieppa (08:10):

Team of one! .

Eric Cross (08:11):

A team of one! Right? Like, yeah. And how long have you been running this yourself?

Marilyn Dieppa (08:16):

This is probably like my sixth year.

Eric Cross (08:19):

OK.

Marilyn Dieppa (08:20):

So we've been very successful. That program is totally inquiry. It's totally on them. I don't know how to use a little, you know, remote control. I don't know how to do anything. I'm there for troubleshoot and to make sure that they're on task, but they have been very successful because I do put everything on them. And I go, "It's not my robot. This is your robot." So they build everything

Eric Cross (08:40):

And that seems to be the theme, especially with, a lot of times, with science teachers. And encouraging them to say, "You don't have to be the expert in everything." Teachers tend to be more like risk-taking and innovative when they're willing to like, not have to be—I don't have to know everything in order to do something.

Marilyn Dieppa (08:54):

Exactly. So we've been very successful. Very proud of my students because you know, we've, gone to Worlds twice. We've qualified three times in the six years. Actually, I had two teams that went last year.

Eric Cross (09:07):

What is, what is Worlds? That sounds like a big deal.

Marilyn Dieppa (09:10):

It's a huge thing. And it's teams from all over the world. You can actually look it up online. It's—from this year, there were teams, although they said China was not gonna be in there, there were actually some teams from China. There were teams from New Zealand. There were teams from South Africa, the UK, a lot of teams from, from Europe. And then there are teams from here. We are the host country. We've been the host country for a while. But it's amazing. The first time we went, the first team that we were paired up with was a Russian team. So, you know, there was Google Translate and the kids—and it's, they didn't need to know the same language because they communicated with the robots. So it was really amazing. They work collaboratively. So it's not like a battle box. So they work two teams together and whatever, they both get together, they both earn the same points. So it teaches leadership, and there's so much more to it than just a robot. They have to know how to communicate, because they do get interviewed. They do online challenges. It's so many things. It's just—I think it's one of the best things that our district has really invested in, because these kids are so into it, and they love it so much. For the last year and this year I have the same kids that are in the robotics. I'm also gonna be teaching them physical science. So I have to teach them that separation between what we're doing in our science classes versus what they're doing in the class. So there has to be a separation. So they see one side of me in this class where it's very laid back. It's very chill. No, no, you, you guys do it. There's no sitting

down. It's like organized chaos, I call it all the time. But then in the classroom, it has to be a little bit more organized.

Eric Cross (10:53):

Is that something that, as far as getting the parts—like people do, like, GoFundMes and donations and Donors Choose. Can you—

Marilyn Dieppa (11:00):

We get grant money, grant money from the town of Miami Lakes, the town that I work in. So the town actually sponsors us. Without them, we could not do that. It is a very expensive activity to do. If you go online and you look up the prices, you'll be, "Oh my gosh, goodness, it's very expensive." You know? But the smiles on their faces when they come back and they have those little certificates, it means nothing, you know, it's a little piece of paper. But that, to me, to them, it means the world.

Eric Cross (11:27):

Well, teachers, if you're looking for ways to get that stuff funded, be fearless on behalf of asking for free things for your kids. Find a local business that somewhat connects to even robotics and say, "Hey, look, I've got 50 kids that really want to get after it. And we need X amount of dollars so we can buy those robotics kits. We'll put your banner up somewhere. We'll do all these other things. But come support our students. Come to the competition. Donate whatever you can for our students." And many organizations will say, will say yes. Many just aren't asked.

Marilyn Dieppa (11:57):

Right. And a lot of towns do have, like, education advisory boards. You wanna reach out to those people. 'Cause those are the communities where they have money set aside in order to assist things like this.

Eric Cross (12:09):

Do you notice any carryover between the students that do get involved with these extracurriculars into the regular science classroom?

Marilyn Dieppa (12:16):

For sure. They're more, they're more disciplined. They tend to care more about the sciences because they see that link in the science. I mean, my kids are talking about gear ratios. They're talking about, you know, mass accelerations. They had—they infuse all these things. And when they see it in the science class, they're making that connection, which is really wonderful.

Eric Cross (12:41):

It seems like there's a high level of engagement because this is an authentic thing. It's almost, this should be science.

Marilyn Dieppa (12:46):

Yes. And not only that, the writing skills that have to be interpreted because part of the program is that they, they don't necessarily have to have it, but in order for them to go far and make it to Worlds, they

have to have an engineering notebook. So our strength sometimes is not the robot, but the engineering notebook.

Eric Cross (13:02):

his is where the journalism major shines.

Marilyn Dieppa (13:05):

Yes. And I go, "Guys, this is your Ikea manual. You have to explain what you're doing, what pieces you're using, what's going right." You know, and then they have to interpret and see what didn't work. How can they fix it? So there's so much problem-solving. It's real life, it's what they're doing there. More so than sitting and learning rote, you know, vocabulary or whatever the case might be, 'cause they're actually applying what they're learning.

Eric Cross (13:31):

Yeah. And that's, that's so critical, the communication piece. Because seems like now in society, more than ever, even just being able to communicate something with bad science is convincing to people. Versus if you have great science, but you can't communicate it, you're not gonna be able to get it out into the public. It's so great to see a program that exactly brings together this literacy aspect, in addition to kind of this content and skills aspect of doing the science.

Marilyn Dieppa (13:57):

And that's what really, you know, since I started, that's pretty much what I've done. My strength, believe it or not, when I was growing up, was not the science. I think I didn't really have a really good science background. But I remember reflecting and saying, "I don't want my students to feel like I felt when I was a child." I wanna make sure that I give them everything, you know, give them the hands-on experience. I think I had one teacher when I was growing up and I still remember him. He was my second-grade teacher and he was just so amazing with the science. And it was just like the only really good experience I had. And I think that always stayed in the back of my mind. And when I started teaching and I go, "I wanna give these kids these experiences." You know, sometimes I see kids in eighth grade and I go, how sad! They see water boiling and they're just, like, in a lab room. And they're just like, in awe, because there's water boiling. And I go, "You guys haven't seen water boil before?" And he goes, "No, no, no, not like this!" And I go, oh wow.

Eric Cross (14:58):

Even if it's simple, everyday phenomena, everyday things that people deal with in a science classroom, or when you're a teacher in that setting, it's just—it just hits different, right? Like you, you know, you drop dye into water and watch it diffuse. And it's like, whoa! Because they're looking at it through that different lens. And that's why one of the reasons why—I'm super-biased, but as science teachers, we get to do the coolest stuff.

Marilyn Dieppa (15:21):

Yeah, we do.

Eric Cross (15:22):

We just do. It's so much fun. And basically anything that happens, that's cool, like in, innovation and things like that, we can figure out ways to incorporate into our classroom. Now, as a coach and as a mentor, you've had multiple student teachers in your classroom. And we have, you know, huge need for new teachers. I teach teachers who are getting their CR, getting their credential. And the landscape of education is, is constantly shifting. You've watched it shift over the years. What are your biggest tips that you give to new teachers?

Marilyn Dieppa (15:49):

Well, I just had an intern last semester. I've had a few interns where, you know, not only are they doing this, but they're also learning robotics too. So they're really getting aspect in how to incorporate that. You don't have to have everything separate. You can include everything together. But I think, I think it just comes from the foundation where they're not exposed. Even me, when I went to college, I don't remember doing so many labs as I should have. And I think it's just a fear of them trying new things and failing. And I go, you know what? I, sometimes my first class is my guinea pig class, because I always change my labs. I don't like to do the same thing over and over again. If I see something online, I go, "Oh wow. You know what, I'm gonna try it." And I go, "Hey guys, this is the first time; we're gonna do this together." And it's really—it's just for them not to be fearful. And I think especially for science teachers or like even elementary, to give the kids the foundation that they need, they're afraid. They're afraid of failing and not trying something new, and say, "Hey, it's OK. There's other ways of doing this." You know? So I always say, "My first class is always my guinea pig class, 'cause that's the class I'm gonna try this on." And then, you know, when you have to tweak, reflect, then we do that.

Eric Cross (17:06):

What are some of the things that you've seen or encouragements that you give to teachers who are teaching, kind of, in this kind of newer landscape, where as teachers, you become more than just a science teacher. I mean, you're a mentor. You're an encourager. Sometimes you're a counselor for students. And then there, there are things that happen externally that impact teachers as well. It's a tough job.

Marilyn Dieppa (17:24):

So I always say, you know, when you have a child, we have to be very aware of what's happening with our children. Especially after these two years of the pandemic. That was kind of crazy. Last year was a really tough year, I think, for most educators that were back in the classroom. But I always tell 'em, you have to be really aware of what's going on with these kids outside. When you see somebody who's not doing anything and then you have the parents are there supporting. There's something going—I mean, there has to be something going on. Kids are not just going to be so, so defiant. You're gonna have very few that will be like that. But most of them it's just gotta see and read those kids and see what's going on, and don't be afraid to—and I always say, I'm not there to really be your friend, but I'm there to help you. And you gotta tell 'em, you know, if you need to talk, come talk to me. Have an open-door policy with those kids.

Eric Cross (18:16):

What's been your favorite part of the job? Something you really enjoy about the job? Especially having been teaching for as long as you have.

Marilyn Dieppa (18:23):

I think my favorite thing is their success. Whether they have struggled all the year and they've had that one piece of success or they don't realize what they got out of middle school until they get to high school and they come back to you and they tell you it's, you know, seeing my kids, whether it's robotics, whether it's in the classroom, that they pass a test for the first time, those are my moments of success. And that's what makes me happy.

Eric Cross (18:52):

So you get those ahas, you get those wins, those turnarounds. And it's like, "Ah, this keeps me going. This is so good!" But there's something that I say to myself when I do get challenges in the classroom is teaching seventh grade, I say, "They're 12. They're 13. They've been on earth for 13 years. And for the first five or six, like, you know, they're just kind of coming online at that point. And they're going through all these changes." And it grounds me in the fact that 'cause sometimes the things that you experience can be really, really challenging kind of interpersonally. And I remind myself, "Well, it's like—you're not 28 years old. Like, you're, 12 and 13, and you need me to not be Mr. Cross, the science teacher. You need me to be, you know, Mr. Cross, the mentor, or Mr. Cross, the coach." Like you were saying, open door. Keeping that open door, keeping that relationship. Because so much of what we're doing is like life coaching in addition—and that connects to their success in the classroom. There's a direct relationship.

Marilyn Dieppa (19:45):

Yes, yes, yes, absolutely.

Eric Cross (19:46):

Now what gets you back each fall? Because at the end, you know, every school year it's like, "That was a tough one!" Especially with the last couple years. Right? So what's been something, what gets you back in the classroom every fall, so that you're ready for your students?

Marilyn Dieppa (20:02):

I think the support I get at home. I have a husband who is the most supportive person ever. He always tells me, "Your kids are grown up." You know, my kids are adults now. "Enjoy these kids, what they're doing. You don't know how much they need you." So he does tell me that. He goes, "And don't complain! You love it!" And also my administration, they back me up. And that's what I think what keeps you coming back. I love my administration. Whatever I ask for, they don't tell me no. They tell me I'm crazy, but they don't tell me no. You know, we have these huge competitions once a year at our school, administration has to be involved 'cause they have to be there, and they go, "We do this because we love you! But you know, you're crazy!"

Eric Cross (20:48):

It's interesting, 'cause both of these things, they involve human connection. And one is your support

system at home, which is incredibly valuable. Shout out to your husband; I don't know if he's around. And then the culture, like, feeling supported. Teachers, you know—and it's not just in education, but people, I've experienced—will work harder, longer, be more committed, when they have that intangible. When they feel like they're connected to something bigger than them. Or on a team, not in a silo. And one person can really create or break whether that happens. And just like us in the classroom as a teacher, right? Like, "What makes you like this teacher's class?" "Well, I feel connected. I feel safe. I feel it's fun. It's the culture!" I like to end with asking this question and you kind of alluded to an answer earlier, but who is one, or it could be multiple teachers, that you've had in your own life as a kid growing up or young person in kindergarten through 12th grade, could even be college, that has inspired you? Or made a difference in your life one way or another? Like, who pops out? I feel like we all have somebody.

Marilyn Dieppa (21:58):

One was my second grade teacher, as I mentioned before. Mr. Fernandez, never forget him. And my other teacher was my high school teacher, Mr. Velazquez. It was in New Jersey as well. And he was the one that really got me into the love of writing. He was my Spanish teacher, actually. He wasn't even, you know—he was like an elective teacher. But he just made me believe like, "Wow, you're like a really good writer!" To me, those two gentlemen really stood out. Very fond memories of being in school and really enjoying what I was doing.

Eric Cross (22:33):

There are so many teachers that we all have been impacted by. And many of us now who are teachers, we sit in that same seat. We fill those same shoes. And going back to what you had said earlier, one of the most rewarding things is when those kids come back to you. And I'm thinking about all the work that you've done, all the students you've poured into, all the competitions you've done. The ones that have come back to you are a small fragment of the ones that you've impacted.

Marilyn Dieppa (22:59):

Mm-hmm, yeah.

Eric Cross (23:00):

'Cause we think about our own story, right? Like you've gone on and paid dividends for that one teacher in second grade. You know, Mr. Fernandez or Mr. Velasquez like, they went and they just gave you exposure to something or helped you fall in love with something. And you went on this trajectory. And if we could see the timeline of, like, this teacher created Marilyn, and Marilyn went and did this, and then what do all those students do? And that, I don't know, there's so many jobs that are gonna be hard work and that are gonna be challenging and stressful. But that is the thing that I think fills me when I listen to your story. I just think about like all the students throughout Florida that you have—you probably will never hear from, but have gone on to do amazing things or become great people who would go back and talk about you and say you were an inspiration for them. Marilyn, thank you for taking the time out to be on the podcast and for not only teaching students, but inspiring and coaching younger teachers and new teachers. It's so critical. And for being willing to spend so much of your time beyond the classroom to

create these opportunities for students to do this awesome, fun, engaging science, and go to Worlds. I wish you a great school year.

Marilyn Dieppa (24:11):

Thank you. You too.

Eric Cross (24:12):

We hope you make it to Worlds again and crush, in a competitive, collaborative type of environment. We'll be checking out—I'm sure other teachers will check out Vex Robotics. Thanks for being on the podcast.

Marilyn Dieppa (24:23):

Thank you. You too, Eric.

Eric Cross (24:26):

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