S4E7 Paulo Tan Main Session

[00:00:00]

Teddy: Hey everyone, this is Theodore Chao and I'm here with another episode of the TODOS Podcast, I'm really excited about today's episode. We have an amazing guest, but I'm also gonna introduce you to my amazing co-host, Shari Kaku.

Shari: Thanks, Teddy. Konichiwa, I guess. Aloha. Welcome again, like Teddy said, to our podcast. And without further ado, let's introduce our next guest, Teddy.

Teddy: Yeah, I'm really excited. Not only is our next guest, a deep personal friend of mine, but he's somebody I really look up to because the work he does is so thoughtful and necessary for what we do in mathematics education. We're, really excited to welcome Paolo Tan.

Paolo is currently a professor of mathematics education and special education at UC Santa Cruz. Paolo has written an amazing book called, humanizing disability and math education with, Alexis Padilla, Erica Mason and, James Sheldon. He's recently gotten an NSF grant with Jessica Hunt and Jonee Wilson.

I can't say more amazing [00:01:00] things. about Paolo's work. It's changed my outlook on, disability and working with students with special needs. But also just because, Paolo is somebody who I consider a deep friend because his pathway, his understanding of math education, his teaching background are somewhat reflective of my own , as a Chinese American male.

Every time I think, this is hard stuff. I look over and see Paolo doing it and killing it and doing amazing work. And that's been really inspiring to me. So I'm excited to talk and go deep into some conversation about Asian American math identity with Paolo's hand today.

Paulo: Ni

Teddy: Paolo, you want to add any more to the intro?

Paulo: Tán Bǎoluó, hi, I am Paolo Tan. I identify as Chinese American, cisgender male, working class, non disabled, a parent of disabled young adult.

I'm also, a brother, a son, and just really excited to [00:02:00] be here joining you, Shari, and Teddy on your very important podcast.

Teddy: I love it. And shout out to the Mandarin. I know Paolo, you and I have talked about, getting our kids to speak Chinese and it's something that I've struggled with so much.

Paulo: I've always been very conscious of that because I did grow up here in both the USA and in Brazil. And, and so I was born in Brazil and moved here at the age of 11. My parents, spoke, Chinese and they're both from China. They grew up in China, didn't move. To Brazil until they were adults, and then to the United States, later on.

The Chinese language, Mandarin, has always been part of my life. I think they would always say that, my Mandarin was very rough and not great, so I've always been very [00:03:00] conscious of that and very unconfident in my Mandarin. Sometimes I feel like, I speak great Mandarin and they're like, no, you don't.

And that's just kind of like the Chinese parents, approach to things you know, but other people would say that, your Chinese is really good, it's very conflicted. So when you asked me to use any language my first reaction was, no, I better not, I know that it's not great.

But then, in the moment I was just like, I could say a few things, understand things for sure.

Teddy: That we talk about a lot is Paolo, I feel you talking about your Chinese language ability with a hint of shame, Which is deeply a part of the way Asian Americans are positioned.

Paulo: Yeah, for sure. You know, whenever we visit our relatives or, my parents have their friends, they would try to speak to me in Chinese. It's like the shame and just freezing in the moment. But then, you know, when we just kind of [00:04:00] were sitting back and just having a chat,

it flows out pretty smoothly. So yeah, that's very

Teddy: You started telling your story, you want to tell us more about how you identify as Asian American and what it means to you and how it's evolved.

Paulo: It has evolved quite a bit. I would say more so in the past four years, which is really interesting because I just turned 50 a few months ago.

Teddy: Oh, happy birthday!.

Paulo: really

Shari: a baby.

Paulo: In life, to think about this Chinese American identity that has been with me throughout my life. I mentioned I was born in Brazil.

My mom and dad, I have two older sisters. They left China, with my oldest sister, and, were in Taiwan because they had to flee to Taiwan from this war, that took place in the late 40s, 1940s. [00:05:00] And so then, I think at that time, as with many folks in Taiwan, they were seeking opportunities outside of Taiwan.

There weren't many opportunities there. My dad came to Brazil to look for some opportunities, had some connections out here. They moved. Ever since that time, this family that, I would say my two older sisters, my mom and dad, we just been sort of like separated from the rest of our family.

And before that there was a separation because of the civil war. In my dad's family, in particular. They decided that, some of our family stay in China while the other part of the family, moved to Taiwan. And, and as, you know, as I learned more this history and in that as I was growing up hearing these things, I go back to what I shared earlier

it's been only the last few years that I've really dug into what happened during that time [00:06:00] period, families were separated and weren't allowed to reconnect for 30 years. My dad was a young kid. He had older brothers, that were left there in China during the cultural revolution Teddy, you mentioned in one of the previous episodes, right?

Like eating bitterness. I mean, that, going on, you know, and, in that, then, I lived that through sort of what was going on when I was in Brazil growing up, learning about the stories about, my dad and, trying to reconnect with family, trying to get, Not being able to do things or have, during that period.

I was young and didn't know too much about that, until very recently, just, again, just started to have conversations again with my mom and dad about that

period, a few years ago. It was so fascinating to learn that. My identity was, you know, just being with my family in Brazil, in the country.

That was foreign to my [00:07:00] parents, but that was a country that was I was born in. And so, you know, being a it's South America. So I still think it's Chinese American, right? In a place, that there were other, Chinese Americans. There were many Japanese Americans, in Brazil at that time.

And so we were still connected to the Asian community, but when we went to school, you see very few Asians as I did when I went to school here in the U. S. But then when we would have, gatherings with my parents friends, it was all Chinese people and we would connect with all Chinese friends, right?

I think that was a beautiful thing. My parents did it as just being part of a community, but then also having us be part of a Asian community, because we weren't that in school. So, so this Chinese American started with me in Brazil.

And [00:08:00] then I think my parents decided to move to the U S I mean, Brazil wasn't. a great place in many ways politically at that time in the 70s they were under a military dictatorship so a lot of things weren't great so they were like okay we're gonna move to the U. S. and had some connections here

So I was 11 when I moved here with my family to the U. S. And actually landed really where you all are right now in L. A. Our first spots, spent a year there. And then, after that, it was, I mean, it was great because we had, a lot of, Chinese people here in LA, my parents actually placed us in a, school in a.

Portugal enclave in LA. I don't know where that is. We were there for a few months and, the language was, it was a immersion program, I think it was a bilingual school where they spoke Portuguese,

Teddy: [00:09:00] Okay.

Paulo: It was pretty much everybody from Portugal. Students from Portugal, teachers from Portugal, and it was a really nice transition my sisters and I came with very limited English, right? We spoke Portuguese, we spoke Mandarin at home, and that was the two languages. And so when we moved to LA, we got into this school, and started learning English that way. Unfortunately we moved out of LA after a year and ended up in, Kansas, because my dad's, was working for General Electric, I think.

They just relocate you, wherever has, better, situations for them. It was in Lenexa, Kansas. So we went from, Brazil. To L. A., to Kansas, the Midwest at that time, this was the 80s, was very homogeneous in many ways, and where we [00:10:00] lived, there was, I think, maybe one or two other Chinese folks that went to the school.

I went to, and that person wasn't even in the same grade that I was. But,

Teddy: wow, yeah, yeah,

Paulo: that was my experience growing up, in the Midwest. So I spent the next,

17 or 18 years after that in the Midwest. So I grew up there, I went to school there. It was one of the very few Asians in this predominantly white school district.

There are not many other, races, there either. They have, a few black students, a few Latinx students, but it was just very white, suburban, my Asian identity growing up was very much, I knew I was Chinese American and even in Kansas, my parents connected with Chinese folks there

and so we still had that Chinese community. In Kansas we came up from all over Kansas to come together, and [00:11:00] connect. But I feel like during most of my upbringing, both in Brazil and here in U. S., I had a very assimilationist approach. approach to my identity I knew I was an American.

I understood that. But I didn't want to stand out, I wanted to fit in, I wanted to, not speak Chinese. I wanted to have no accents. And so I worked really hard at that. I didn't want to get pulled out, to get English, services,

they were pulling kids out. I was just like, I'm going to do everything I can just to stay in the classroom, just to. You know, be white. And that was something that carried me through school and beyond school. I went to the University of Kansas, which was not too far from where, we lived in Kansas City.

So it was pretty close. We got to be near my [00:12:00] family and things like that. But even then, I got to meet a lot more Asian Americans, right? Chinese American, Koreans American, international students. It was just so nice. At the same time, I still had this identity, as a Chinese American, as being very assimilationist, into teaching, where I was like, I want to teach where I went to school, in suburban, America, I wanted to teach where I went to my actual high school. Like that's where I wanted to

Teddy: Oh, wow. So you wanted to teach, you want to stay in Kansas and be a

Paulo: I wanted to be a

Teddy: your

Paulo: Kansas teacher at the high school that I went to, and now I think about that, it's like, why? Like, why did I want to do that? I actually didn't have an awesome experience in some ways, i, was very isolated, I had some, Friends that I grew up with up to about middle school, after middle school, people tend to bunch up, with folks who are more like them.

And so I feel like after middle school, [00:13:00] I definitely felt that. A lot of my friends, we grew apart, some of the friends that I've been together with since middle school, they started doing their own thing. I didn't really make a lot of friends, outside of the Chinese community that I mentioned.

Close friends, but in school it was not that, and so I just wonder, why did I want to? I don't want to teach math,

Teddy: Yeah. Yeah.

Paulo: at the school that I went to, which is like, I feel like that's part of this, just like serving the people in power. I was drinking the Kool Aid.

Teddy: I mean, that's one way to say it, but knowing you, the opportunity for students like you to see you, I'm assuming that you probably had very few Asian American teachers growing up, in Kansas.

Paulo: I didn't have any.

Teddy: Like zero, right? The same for me when I was growing up in Texas, I think you're tough on yourself, but I can sense that one of the reasons to be a teacher, particularly in your own high [00:14:00] school is so students like you could see you, visibility, and exposure, and seeing someone who's doing it, who looks like you, that means a lot.

To kids.

Paulo: It wasn't the purpose of why I was doing it.

Teddy: Huh,

Paulo: When I did go back to teach, what's interesting is I couldn't get a job at the school that I applied for, which at school, I went

Teddy: yea, yea,

Paulo: they're like, we're not hiring. I mean, they didn't say that you're not good enough for us, you know, like, but I went to a school nearby, which was more diverse,

yeah, I think what you mentioned, Teddy, then I got to see the importance of that, because I had students who, were from Southeast Asia, it wasn't verbally said, but I think it was felt that they appreciated having a class, with me. I had, Black mothers say, I want my child in your class,

not this other person's class. And it was because of this identity. Like, you understand the kid better [00:15:00] than a white teacher will. And so that was definitely something that came up, but it was not something that I was part of what I wanted to do, about, being a teacher.

Shari: I wonder if going back to your hometown, that is a familiar part, not realizing where you are in the system or by race or color, anything, right? What you identify it, but just going back to something comfortable in a way, or even though you look back now and go, Hey, wait, that really wasn't that comfortable.

Yeah.

Paulo: Yeah, it wasn't a pleasant experience either, being in a space where I am the only Asian teacher now, like I was a student, now I'm the only Asian teacher, pretty much every teacher is white. Not having camaraderie with.

The people I work with, right? They had their own sort of groups, the in group, if you will.

Teddy: Teachers have cliques too, [00:16:00] right?

Paulo: Yeah, absolutely. And so I was young at that time, so I was like, okay, maybe I could connect with some teachers around the same age and, pretty much was like,

Teddy: Wow.

Paulo: It was not there and so I was connecting with older teachers who I felt were a little bit more laid back, right?

I could have conversations with, easier conversations with than with the young teachers who were around my age, but we didn't share much in common. Whereas the older teachers actually didn't care about whether they had anything in common. They just wanted to have conversations. That was my experience anyway.

It was still very isolating in many ways being a teacher in that situation. It wasn't until I got to be in the position there. I am as an academic, right? That I can connect with.

Shari: Oh, wow.

Paulo: To have connections with Teddy, for example. That [00:17:00] just didn't happen, when I was working in school.

There were many, I think that wasn't the primary reason why I stopped teaching and went to pursue my graduate degree. But yeah, I think back on that and I was like, that wasn't a great experience for me I was also interested in coaching.

Part of that is I wanted to be a coach.

Shari: Oh,

Teddy: I didn't know that. What sports did you want to coach?

Paulo: I was, really interested in track and field,

Shari: Oh,

Paulo: something that I competed in during my time in high school, and then, did it in college too. I walked on to the University of Kansas track and field team

Teddy: Oh, yeah.

Paulo: Ended up getting a spot on the team.

Shari: oh, wow.

Paulo: yeah, sports is always part of, my identity.

I didn't major in sports. It's a big part of who I am going off in Brazil, soccer. Yeah, I love soccer. I love, you know, just. I was just,

Teddy: Football, right?

Paulo: Yeah, definitely. [00:18:00] But when I came to the United States football or soccer wasn't, a big thing. So I'm like, what else can I do here?

So I got into sports like basketball, baseball, football. I played all sports and something you mentioned before Teddy in one of the podcasts was. The lineage, I feel like, I have inherited, some of that somehow. I don't know, where that came from.

My mom had really strong legs.

Shari: Oh, wow.

Paulo: strong, like, you can do something. I don't know where that came from, right? But then, when I was growing up, I did a lot of sports, Some of it is not just like you do it right and you get better at it.

It's the kind of genetics that gets passed on, so, I feel like at some point in my family's history, there was something that physically provided me with the opportunity to excel in many ways in sports to be able to, I was, in track. I was a.

Triple jumper [00:19:00] and a long

Teddy: wow,

Paulo: jump.

Shari: Wow.

Paulo: yeah, like I could jump. I don't know why I developed that jumping ability, and had these strong legs that my mom had. So part of it, I know, like I wanted to be coaching. So I feel like that was why I

Teddy: yeah, yeah,

Paulo: When I was in the track and field team at the University of Kansas, that was the only Asian

Teddy: you're the only

Paulo: on the team, right?

Teddy: oh my gosh, yeah,

Paulo: I love doing that, I love the camaraderie, but then it was still very, isolating.

Teddy: yeah,

Paulo: I was the only coach, when I was coaching high school. That was, , it was just all of that. And I'm like, why would I do that, right? So, very conflicting,

Teddy: At the time, did you recognize that? I grew up in Texas, but I lived in the Midwest for a long time. A lot of family in the Midwest. I think that when you're in it, you don't recognize it. I didn't know that there was something else possible until I would like hang with my family on the East coast, on the West coast.

But like, whoa, whoa, whoa. Like you're, you're in an all Asian basketball league.[00:20:00]

Shari: Teddy.

Paulo: yeah, it wasn't until, folks from college, they started to move out of Kansas, right? And into, like, San Francisco, and they're like, Hey, you know, like, like you mentioned, Teddy, I, I joined, All, you know, Asian league. And I was like, what everybody's like, yeah,

Shari: all the same height.

Paulo: That this world existed.

Right. So there are Chinese people around, right. I mean, but it's not like you're making these connections. Oh, there's a whole school, full of Asians. It just blew my mind because I went to a school where I and a handful of others were the only Asians

Shari: And I was the opposite of you too, right? I'm five feet and I told people I play basketball. They're like, what? And our friend who's six two, they never questioned him if he played basketball and he never played basketball. You're right.

Paulo: I'm not tall either for like an Asian, I mean, for a basketball player, I'm [00:21:00] 5'9 I got cut from the basketball team when I tried out. I feel like I got better, since then, I still play basketball to this day.

I'm still in sports.

Teddy: Yeah.

Paulo: part of my identity, right. For me having like basketball as part of my life. Getting to graduate school because

Shari: oh.

Paulo: Was just, something that took me away from the writing, the readings and just

Shari: an outlet.

Paulo: yeah, definitely an outlet and something I enjoy doing I feel like my Chinese identity has evolved a lot over the last few years.

Thank you. Just learning about the history, what it means to be Asian American. And so, I feel like I've been more, you know, thinking myself as, someone who is agitating, right, rather than assimilating, thinking of, rather than, you know, submissive Asian American, the [00:22:00] stereotypical.

Kind of flipping that,

Teddy: I mean, you call your model of math disability the revolutionary model, right? I thought, when I read that, I was like, yo, these, you know, like Erica, Alexis, and James and you are going hard on this, man.

Paulo: I feel like we should have taken a harder, like, looking back, I'm like, I feel like we took that word too lightly. In my view now, we have to go harder than what we talked about in the 2019 book. That was. A change, for sure, from the medical model of disability, which sees, disabilities as deficits, to something that's more transformative, and so I think with my Chinese American

Teddy: Yeah.

Paulo: I feel like there is, this huge contrast, like for me growing up, being very compliant.

To me being a parent of a person with disability as a, being in this, you know, individualized [00:23:00] education program meetings,

Shari: Mm.

Paulo: That's why you educate expect you to comply, consent to what we're saying. And then you are just. pushing back. You are saying no, right?

You are agitating us, right? And that's very uncomfortable from a position of, wanting to be seen, as nice and to please people, right? That was a shift, and something that I've been embracing a lot more, over the last two years, just because I feel like, we are, Asian Americans living in the belly of the beast, right?

The US who are carrying on the looting of the world, of our resources engaging in forever wars, in destroying our planet. And I mean, we, for me, right. Being nice before was just me contributing that, right. As a tool to,

Teddy: Being used, right? Being part of the [00:24:00] system,

Paulo: Being part of the system, as youth, to serve their needs, to this beast, and so I'm thinking of myself more as somebody who is trying to

upset that stomach, if you will.

Teddy: Yeah.

Paulo: Hey, this is something that, you know, we're not what you say we are, right? You're not going to provide us, there are better ways and your way, has to change.

Teddy: It doesn't work. Burn it

Paulo: I think that, something, with the new administration or even the previous administration, there is a lot of Anti Chinese rhetoric, right?

And so I fear that that is going to, not get any better anytime soon. Right.

Teddy: I want to just reiterate this point that I think you're saying to make it clear, right? We talk a lot about Asian American and Asian American Pacific Islander identity in the ways that many of us are positioned, many of us grew up in households that might be first, [00:25:00] second, third generation that still were layered in the remnants of, filial piety or Confucianism.

So to be a good child means to be obedient. It means to be honoring your elders . It means to be listening, means to be complicit and helpful. And I think that is sort of been perversed. Into the ways the model minority myth is created in the United States as Asian Americans are submissive, obedient, good students.

And particularly in the work that we do are really good at math when math is taught in a way that's about regurgitation. Right. And so Paolo, I think, knowing you and being with you along this journey and watching this, you call it a turn, but I think you're just becoming the full version of yourself I've seen through your scholarship.

Embracing more and more of like, Hey, I'm not just this person. You're positioning me as I'm not just this Asian American math teacher who's good at math and knows how to teach math in good ways and is complicit in the system I recognize fully. And I think for you, as a parent, this system is [00:26:00] not serving people like me, people like my child, people like my own family.

And the more we try to figure out how to do it, the more realize it's the entire system, right? The whole setup, the whole ways that many of us are positioned that need to change drastically. So that's my synopsis of where I see you going.

Shari: Yeah, I want to add to it's very personal in a way too. So I'm curious Paulo, was there something that was a turning point for this to flip the switch not in a negative way or that you're turning to any, cause you had mentioned first assimilating and now another word you use was agitating the system so is there something that happened To flip that switch.

Paulo: Thank you, Shari, for that question. I would point to a moment in my doctoral study. I went to graduate school, being really dissatisfied with my math

teaching and so when I was teaching like [00:27:00] middle high school and I was just like Wow, so just I'm You know, putting all this effort in, I don't feel like students are learning.

There's something else, right? And as I reflect now, right? There's a that we could talk about, why, that's happening and why that keeps happening. But that was my impetus, for doing graduate work. I, started doing that.

At the University of Georgia, that was my first, doctorate program

Teddy: Just a shout out at that time, university of Georgia was probably one of the top, math education programs in the country. And it's a deep, deep history, right? So you being there shows that you're at the top of your game.

Paulo: I actually, going back and aligning to the story. Like, I was like, I'll just do my doctorate work at the universe campus, right? Where I grew up, Shari, that's familiar to me, right? That's where I would do my doc work. And Susan Gay, you might know [00:28:00] Susan Gay, who's a big, giant in the field of math education.

Teddy: The AMTE travel award is named the Susan Gay award,

Paulo: Yeah, particularly, mathematics, teacher education, Susan Gay was there, actually, I did my undergraduate work with

Teddy: Yeah.

Paulo: Susan Gay, which was like, I didn't realize at the time how influential, Dr. Gay, is, and, Dr. Gay was like, I don't think you should come here to University of Kansas to do your doctorate work.

You should go to the East Coast because they had UGA, Maryland, Penn State. There are many institutions that are just doing great things in math education then. And so that's where I got that connection I think, Delaware was another place.

So I visited a few of them and ended up going to UGA. During that time, my former partner and I had our first son, he was two years old when I started my doctorate program. And that's when, he was diagnosed with a disability. So I stopped, [00:29:00] my math education doctoral program.

I did come back to it a few years later. This time in the Midwest at Indiana University. You mentioned math education as something, I mean, Indiana had a great math education

Teddy: Incredible program.

Paulo: But for me, it just felt disconnected, from my life, okay, math education, learning about, theories of math, how to teach math better.

And at UGA, I was doing math courses, abstract algebra, and it was just like, why am I spending hours reading things that are irrelevant to me? Right? And so that's when I decided to switch to special education.

Teddy: wow.

Paulo: I want to do something right?

If I'm pursuing a doctorate degree, I want to pursue a doctorate degree with something I care about. I really care about, learning more, about the special education world because I knew, At that time, I would be navigating that system. Being a teacher, we all took one special education course, and I

Shari: You're right.

Paulo: I took one special education course, and yeah, you're [00:30:00] ready to teach everybody. But I wasn't, ready. I didn't know much about it, even when I was teaching. And so I felt like I just want to learn more, right? And so my PhD became special education.

The question, going to your question, Shari, like the thing, that was a turning point, but then a bigger turning point was when I got connected with.

A particular, set of individuals. One is Kathleen King Thorius, who ended up coming to, IUPUI. So, this is Indianapolis, Purdue University, Indianapolis. As a faculty member, just coming out of college. Finishing her doctorate program at Arizona State with Alfredo Artiles, a big name in disability studies.

And Kathleen introduced me to disability studies and I was just like, Oh, wow, this is a whole [00:31:00] different approach to disability special education. So it was, about that time when, I was actually just , I was Ready to do my dissertation proposal. I had everything ready in special education. And then Kathleen was like, hey, why don't we work together

Teddy: yeah,

Shari: Okay.

Paulo: You could be on my dissertation committee. And she took a look at my proposal and she was like. You know, you shouldn't be doing this.

Shari: Oh, wow.

Paulo: It was very much like special education steeped in the medical model. Right? And then

Shari: Oh, okay,

Paulo: model, which is in the book I mentioned is very much more social right? Revolutionary model. And so that just was like a 180. It was just like, wow, I am doing a different dissertation

Shari: Oh,

Teddy: yeah,

Paulo: studies approach.

Right? And so. That was a huge turning point. And, you know, without Kathleen,

Shari: [00:32:00] yeah.

Paulo: I wouldn't be here in this conversation. I might be a faculty member in a special education

Teddy: Especially that program from a behavioralist perspective, right?

Paulo: Yeah, a behavior perspective. And so that was huge. And then the other person I want to mention is Signe Kastberg, was also at IUPUI at that time.

And then moved to Perdue. Signe really introduced me to the equity work in math education, which was again, you talk about UGA, that's not equity work, right?

Teddy: That was not, there

Paulo: not to say they're doing anything horrible is to say that equity, it's a whole

Teddy: At that time.

Paulo: At that time, right?

Teddy: But even at that time, I mean, it was just a handful of people doing it and they were spread throughout the country. Right. And so it was hard,

Paulo: yeah, I do remember though, like at UGA, they did introduce this idea of equity, right? It wasn't central, it was a reading we did, and I was like, whoa, this is interesting, but then I came back to it right after [00:33:00] Signe. Also on our committee, hey, look, you need to dig into this equity work.

Signe knows a lot of folks in math ed and a great mentor and shouting Signe and Kathleen out here. These two individuals were a huge part of me. They introduced me to this whole new world. Doing readings on Danny Martin at the time was powerful and incorporating that and disability studies into my work,

really worked well together in the kind of work that was more meaningful to me, right? About the experiences of. Folks with disabilities, right? Something that, it's radical, right? It's revolutionary,

Teddy: Yeah. Signe has been instrumental in my career as well. An incredible mentor and opened many doors for me. It's nice to hear her name pop up in your story too. One thing, we want to get into and Shari, you just brought this up, right?

In the book you talk about the difference between the medical, the social, and the [00:34:00] revolutionary model, I wrote a piece, a few years ago on using disability studies framework and looking at the approach of the medical model versus the social model within math education and, how it's connected to achievement and the ways that, students are, quote unquote diagnosed, the revolutionary model is something that I feel like you all use.

Can you maybe explain a little bit about that?

Paulo: I think my thinking around the revolution model that, Alexis, Erika, and James and I talked about during that time has changed quite a bit, to where it is

now. I feel like it's more. Anti ableist, than before. It's more intersectional, so I see the work as more interconnected with other systems of oppression, like racism, sexism, classism, these things are part of the revolution model that we didn't delve into deep enough in that book, but now it's part of what I'm thinking about more, being anti capitalism, [00:35:00] how that pervades, that idea pervades and who gets to seen as worthy of living, who gets, worthy of having, quality math education as doing math education that's rich, that's meaningful, that's connected.

I think that is more about the revolution model getting to the root of how we organize ourselves, what mathematics is right, who can do mathematics, what are the ways mathematics can be done. Some of that is in the book, some of that is not. I feel like ableism, we talked about.

Special education as a problem, right? I'm very critical of special education. I'm also very critical of mathematics education because they need some pervasive math education. And the need to have special education is something that wouldn't be necessary if we were doing things right, right?

If we were serving all the students there wouldn't be a need for

Teddy: wait, can we say that again? I'm gonna paraphrase this. [00:36:00] You're saying that we wouldn't need to have special education if math education wasn't so messed up?

Paulo: That's right. It's not math education. In particular, it's education in general, and math education is part of that. If we were serving all our students, if we said, like, not education, we say we want to serve all our students. I always call that out. You don't mean we want to serve all our students because otherwise you wouldn't be, To use a horrible word, like you wouldn't be, outsourcing students with disabilities to special education, if we're serving all students, then there's no need to do that.

And so, Construction of who's disabled, who's not disabled. It's part of thinking about what math literally is, right? And the same at the kindergarten level, like you are excelling in math. You should go to this track, right? You are doing okay, math, right?

You're doing low. Or in case of students, who receive special education services, hey, you just need to go to a different location altogether, right? [00:37:00] Because these three tracks can't even accommodate you. So yeah, it's definitely, something that I've been very critical of. In our field of math education, and that

we do need an approach that gets to, what, Danny Martin talks about it's anti blackness, right?

It's like this decoloniality, anti colonial, right? It's baked into, the way we do math education.

Shari: One of the things you talked about was who's worthy of doing good math? Engaging in good math and what is that task too, right? And I think just reading your book, reading Rachel Lambert's book, it's all students, right? But what do you mean by all students?

I think sometimes we don't think of students in the margin I noticed too, I was at fault for this, like teaching math, how I was taught,

Teddy: yeah, yeah, yeah,

Shari: rows, and it wasn't a social [00:38:00] subject I would think that math is the least social of all the classes I took.

Right. And I did the least amount of talking, I don't blame anybody for that. I would assume that, idea of what math is, is very deep for many. So Paolo, when you think about it, what are your, we can't save the world in math education yet, but what are some things you're thinking about in terms of if you had a little bumper sticker or a short paragraph of your, now that I know this, what are your words of wisdom

Paulo: I think the idea for me is that if we could do this in math, then it's definitely possible everywhere

It's the content that seemed the most objective, right?

It's the one that it's clearly you are good at math or you're not, right? It's very much, the hardest content area to do. And [00:39:00] so it means we as math educators can be the leaders. We have a lot of Folks who are doing this work. We have a lineage of equity math education folks that have led the way that we can build on and so it's definitely something that can start here

We can lead and show that how that, this idea of de centering the Eurocentric, able bodied, patriarchal curriculum, and ways of thinking of doing math can be, destabilizing that and re centering those who are at, like you mentioned, Shari, the margins, if we could do that, and we can, I think, I.

I really think we can be the leaders in this work.

Shari: So, based on what you said, is there a tangible first step that you [00:40:00] might share with your students or teachers it might be a baby step for some or a leap for others, but what might be a first step or way to transition? The teachers listening might go, Hey, I think I might try that.

Paulo: I'm not very good at giving these, I feel like that's been something that it's not something that I think is, it's hardest for me to say this, I, what I would say, and that's just how I had this experience. In the class that I just finished, University of California, Santa Cruz.

The course was children's mathematical thinking. It wasn't a recognition of the students and what they did, Teddy and I, we grew up eighties and nineties, right? Nothing [00:41:00] like what happened last year. Would have ever happened in that context, like our generation.

And the students I'm working with now, they were part of this history. No one told them that this is right. For me, it wasn't prescriptive. They didn't have to come to me and say, hey, hey, Professor Tan, like, what she would do. Like, you know, like, I didn't tell them. They just did it.

Right. And this generation that we said, well, they're a lost generation, right? They grew up on their social media all the time. Antisocial. Can't do anything. And look what they did last year, with the protest that was worldwide, started here, and that it was just, but then it was quelched, but they had the courage to do this.

They had the wherewithal to do this. They had the collectivism to do it. For me, I don't feel like anybody could have told them how, they just did it. [00:42:00] It was a moment. It's like, this is enough, right? We got to do something and this is what we're going to do.

They did it. That is something that I just am. Just an honor, to be in their presence. I was teaching them for 10 weeks and it's like, wow, these are the students that were in the protest last year. They're teaching me. For me, that was so humbling

Shari: Yeah.

Paulo: to be in that space and then to say, hey, that's.

Teddy, you and I, our generation would never, have been

Shari: Mine too.

Paulo: I mean, when we were students, that didn't even cross our minds, right? We were deep in neoliberalism, and just no contributing to the colonial

Teddy: Not to discredit a lot of the incredible revolutionaries and organizers from the 80s and 90s and 70s, right? But I think that, what you're pointing at is really amazing, the young people are leading the way. They know how to operate [00:43:00] social media. They know how to make things happen.

They know how to make protests, organized protests with free food happen in a day. It blows my mind.

Paulo: Absolutely. And it's the same thing, like the next generation, like we also think about the same thing. And that to me gives, in these times, of despair and, hardship, it's just like. There's a generation coming that they're not going to take this anymore.

Right. And they're going to end up. And I think for me, as with others, right? You mentioned, right? It's not, I don't want to dismiss what we do, right? What we do is important. What others have done is important. We're there for them, right? We're there to support them. We're there to share our ideas, offer what we can.

They're going to take it.

Shari: Paolo it sounds like your journey started with a need, like you, you were uncomfortable with something. So I want to make it better, find out more, right. In terms of your doctorate. It's all coming from your heart. I think that's, the messaging whatever you do first, it comes [00:44:00] from the heart, right?

That's really important, it's really genuine. But I want to take a pause because Teddy mentioned food. Teddy, I don't want to follow up with all your food questions. So, please.

Teddy: What are you eating these days? What's making you excited about food? Paul, you and I have shared a lot of good meals together.

Paulo: We, and yeah, Shari, definitely it comes from the heart. And I think that's part of what, Kari Kokka talks about, the affective part, we want, we

talked about the affect part enough in math education. And I think that's huge. I think about this idea of, caring, what the one I've worked with Alexis Padilla talks about cariño, right?

The cariño is this Spanish word for caring, but it has a deeper meaning, it's a more of a love, it's more of like relational aspect. It's not hierarchical. It's not, I care for you, but it's a mutual care. I will reference a student in my class, who mentioned, cariño also means, you could call [00:45:00] somebody cariño, right?

Ella es cariño. And so, I was like, oh, wow, I didn't know that, right? You could say, ella es Shari, you're carinho, right? You are caring, you're loving. You can't do that in the English language,

Teddy: Oh.

Paulo: Cariño has a deeper meaning. Cariño is something that, Alexis Padilla and I have been talking about a lot in bringing into math education.

What does cariño mean? The affective part is such Another dimension that I don't feel like we talk about enough. I've been doing a lot of like sweet stuff, and it's just like all kinds of sweet stuff. And I like, I do that in breakfast because I could eat that with my coffee

Every day I'm looking forward to breakfast because I get to have this. Sweet.

Teddy: are you a fan of dessert disguises breakfast?

Paulo: Dessert is breakfast, is my power food that gets me to [00:46:00] wake up and say I can't wait for this day. My wonderful breakfast.

Shari: Oh, wow.

Paulo: Like

Teddy: I still remember when I was a teacher there was one of these, PTA events where they brought breakfast to the teachers. They put out all these fresh, waffles and they kept putting ice cream on them.

I was like, this is breakfast.

Shari: When it melts, it's like cream for your coffee.

Paulo: That sounds delicious.

Shari: you remind me of my math department. My department chair would bring the salad, which included jello cream. I'm like, Ooh, I like salad.

Teddy: Yeah.

Shari: Probably like salad there too.

Paulo: I don't do the salads anymore. I'm just going up the whole other side. And that's just like the other meal. I tried to be a little bit more. Modest and grounded, but breakfast. I'm like all out, but it doesn't

Teddy: Yeah.

Paulo: Oh, it is.

Teddy: Is there a particular favorite breakfast you're making or eating these [00:47:00] days?

Paulo: I don't make breakfast. I just consume, processed food.

Shari: That's better.

Teddy: Yeah.

Paulo: Ice cream and chocolate cookies

Teddy: For breakfast. I love it.

Paulo: Belgium waffles. I put healthy stuff on there, like, seeds and nuts. I like the crunch, right? There has to be some texture to it. So that,

Teddy: My son buys, the yo crunch, which is the yogurt that also comes with like M& Ms.

Paulo: Oh yeah.

Teddy: I'm like, well, that's, this is not breakfast, right? It's just M& Ms with some

Paulo: That's breakfast.

Teddy: great.

Shari: it's like a fro

Paulo: in the end, they have to like, Nuts in them, like it has to be peanuts or almonds, otherwise it's not

Shari: okay.

Paulo: Yeah, it has to have that, crunch.

Teddy: Well, I wonder, is that a good place to end?

Shari: Yeah.

Teddy: Let's do it.

Shari: Always with food, right? Food and laughter.

Teddy: Thank you so much. Paulo, this has been amazing. Any last words?

Paulo: I think it's just [00:48:00] been a, wonderful conversation with you all. I do want to shout out, you Teddy, you've been a big part of my life over the last years, introducing me to and welcoming me to the math education community in so many ways. And also Michelle Lo, you and I connected in so many ways.

Last summer you connected me with Michelle because Michelle was gonna be part in the Bay area, right?

Teddy: Bay area.

Shari: Mm.

Teddy: Big last,

Paulo: I was moving up to, Santa Cruz for my new academic position. Circling back to the grant work over the summer, that's when I got word that we were being considered to get funded for the natural science foundation grants, and they were looking for, making sure everything was in place, like the partnership was in place.

And I was like, Well, I'm just getting into the bay area, right? No partners. And you're like, Hey, connect with Michelle and Michelle and I had[00:49:00]

Shari: Yeah.

Paulo: wonderful lunch in Sydney and we had wonderful competition. I've never met Michelle before. Gracious. So gracious. And she's like, okay, I'm going to connect you with this person, this word, this person, and then it worked out beautifully because, I was able to connect with folks in the Bay area, who were able to say, I support this project which really strengthened that grant proposal.

So yeah, the human connection is just amazing.

Teddy: That's awesome.

Paulo: Yeah. That conversation we had in Sydney, Australia and then connecting

Teddy: I was interested in getting noodles.

Shari: Food first and friendship later. We get it. Teddy's

Paulo: So I

Shari: He's like the glue.

Paulo: There are some giants in the Asian American community, math education. Teddy's one of them. You know, Cathery, of course, Cathery Yeh is other one

Teddy: we're all in the same club, man. I love it.

Paulo: We did,

Shari: Teddy's in my book though. He's, there's a picture of like, now I know who the Asian man is in my extending children's [00:50:00] mathematics. It's Teddy. And he's in your book too

Teddy: People to follow on Twitter,

Shari: yeah,

Paulo: yeah,

Teddy: made your book.

Shari: sorry.

Teddy: That's a dozen. It's funny how life changes so fast, right? That list of who to follow on Twitter. Okay. Well, peace y'all. This has been amazing. Thank you again, Paolo. Thank Shari has been up an interesting conversation.

Shari: Thank you.

Teddy: Yeah. Bye bye.