



TEFOS 2019

The Executive Function Online Summit

Hosted by SethPerler.com

EF, Giftedness, and 2e Learners

Seth Perler: Hey, what's up everybody? Welcome back to the executive function online summit. I'm really excited to have you here today. Again, my name is Seth Perler and we're here today with Dr Marlo Pane Thurman at out of Colorado. And I've known Marlo for many years. And um, Marlo has a real, um, warmth not only with the clients and the kids in the families that she works with, but she is really good at seeing, um, she's 10 times smarter than I am when it comes to this stuff. And, but she's really, really good with seeing these really cool and useful details about, uh, how to help complicated kids. She specializes into e kids, so kids who are gifted and talented on the one hand and have learning disabilities. On the other hand, in one human being, so very complicated, kids that are very asynchronous in terms of how they develop and learn and grow and these complications when it comes to executive function can really affect these kids' lives and their ability to execute and do things that are important in their life.

Seth Perler: And Marlo is going to take a look today at how the sensory and physiological components work together behind the scenes. Um, and help us get some insight on stuff that a lot of people don't notice and how important these factors are with what I call iceberg theory. Marlo. I've talked a lot about that in my work, but what's going on beneath the surface. Um, and Marlo is a consultant more or less a two week consultant for families with two e kids. Um, and she does a lot of advocacy and a lot of assessment work to figure out exactly what's going on with these students. So Hello Marlo, how you doing and what are we going to learn today?

Marlo Thurman: Hi, is that it's great to be on. Um, I'm hoping today to give some insight about kind of the underlying study underlying components of executive functioning, which really start with health and wellness and physiology and move up into kind of that relationship between cognition and sensory processing, which obviously is a foundation then for our ability to remember sequence, regulate and execute on other tasks. So that's kind of where I'm headed today.

Seth Perler: Awesome. And for the parent who just went like this and said, what the heck did she just say? What does that mean?

Marlo Thurman: Really when we think about kids, how, um, intelligent the child is, dictates how much information they take in. And that becomes kind of a starting place for how much they can then remember process and act on. And in a really simple way, then that also stimulates the sensory systems. So in other words that you and I can maybe easily pay attention to the dog barking next door, but some kids can't do that because they have heightened acuity for sound and it gives them

this ability to hear this dog that you and I can pretty easily tune out or not hear at all.

Seth Perler: Okay. Cool. And let's do some deeper dive in terms of your background and I'm going to ask you a few just rapid fire questions. And first of all, for getting education for getting work and everything, who are you just in terms of what do you do for fun or what matters to you outside of work?

Marlo Thurman: Um, it's, that's a hard one because I love what I do for work and that is my probably biggest option. But yeah, I am. Um, I'm an artist. I went to school on an art scholarship. I, I'm really family oriented. I love gardening and being outdoors and yeah, I just grew up in the, I grew up in rural Wyoming, so I'm kind of a long ways from home, but my roots are definitely to the ground. So that's pretty important to me. And then I, like I say my work and my, um, personal, social life just all kind of get married together because I love so much what I do professionally.

Seth Perler: Awesome. And then what, what's your professional background and how did you, how did you get to be doing what you're doing now? How'd you get here?

Marlo Thurman: Well, it's kind of unusual because I started out, um, in a doc program in school psychology and ended up with a couple babies and a couple master's degrees instead of the PhD, even though I completed all the doctoral sequence in school psychology. So that launched me into a career as private practice school psychologists doing kind of assessments, advocacy, social skills training, that kind of stuff. I'm very early on in my career I was able to work and connected with Dr Linda Silverman and her obvious expertise for those of you who don't know her is she is our grandmother of gifted education. So that really Penn uphold me into that kind of field of giftedness. And prior to that I had also worked in autism. So those were my two loves autism and giftedness. And when I met Dr Silverman though, it really married another because I have yet to seen to see a, an autistic kid who isn't pretty bright.

Marlo Thurman: So from there I practice for a lot of years. I owned a private school for about 10 years serving two e kids. Um, and then I was in this really awful car accident and spent a year in a Rehab Hospital. And during that time I really decided I wanted to teach educators. So went back and got a second doctorate this time with the actual phd letters in on school psychology. So I have dual doctorates in Ed Psych and um, special education. And that gives me the ability to, you know, work with my private practice to teach as well as, you know, be involved with, you know, both the autism community at a very high level national organizations as well as the National Association for gifted children. And that really dives deep into twice exceptionality because some of our very most twice exceptional kids, um, you know, thrown autism label.

Seth Perler: And how do you help? Like how do you help specifically kids and families who have kids who struggle with executive function?

Marlo Thurman: Well, executive functioning as you know, it has a couple of different definitions but in the formal definition we know that it's, you know, memory and

sequencing and being able to attend and being able to kind of regulate and kind of choose to do this and ignores you that those kinds of things. But when I work with kids, I find them partly because I have that autism background, I find that there's a deeper kind of equation there. And it's really understanding how they, how they interact, how their sensory system interacts with the world. So seeing, hearing, touching, tasting, smelling, hot, cold, Ping, pressure, all of those are sensations. And if those sensations are altered, heightened or missing, then that changes one's ability to act on them in a neuro-typical way. And so at the very first level, it's really kind of understanding that a different sensory processing system will equate to a different executive functioning system.

Marlo Thurman: Well, we know in fact that across, um, all individuals with autism for example, there's, there's not one that doesn't have some executive functioning issues and it's because their sensory processing system is so dramatically different. And then from there, kind of at the kind of at the tail end of the equation. So you guys are all really, really good at that middle stuff. And I'm kind of working at the what feeds that system of executive functioning and then the our products. And sometimes those our products are, you know, tuning out, um, anxieties, stress responses, even to the point of physiological conditions, aesthetic headaches. I'll make eggs, not, you know, to sleep. So in other words, when we're dysregulated, we use tons of energy and that pushes us into a state where we're, you know, kind of using fight, flight, freeze response versus original energy for executive functioning. So that's kind of the two ends of the equation that I work on. Whereas I refer, you know, I refer kind of that traditional middle of that middle of that cycle equation stuff to people who really teach those skills of, you know, organizing, sequencing, intending, remembering.

Seth Perler: Um, and we'll get really deep into that. For those of you that are watching. And that went really fast. I'll ask Marlo to explain things like what does neuro-typical mean and stuff like that later. Um, but you also said a word called original energy. Is that a thing?

Marlo Thurman: Um, when I think of original energy, by the way, if you think about it like an energy pie. Right. Okay.

Seth Perler: Okay. So what was about to say right now is one of my favorite things then I kind of want to wait, but is that a, is that a word, original editor?

Marlo Thurman: Um, is that why it's weird? I use often, in other words, we're not using our emergency reserves. We're using our day to day bucket. That's maybe a better one. Yeah. Okay.

Seth Perler: Well, alright, let, and we'll, I want to, I didn't want to cause the is that has really impacted me a lot, so I just love it. Um, so, okay, cool. Um, and what do you feel like is your superpower as far as executive function or kids or, so I'm assuming it's a two e kids, but [inaudible]

Marlo Thurman: um, I don't know that it is too, he kids, it's understanding that normal executive functioning is based on a construct of kind of traditional what's good and what's bad. In other words, kids who multitask, well, kids who can filter, attend,

organize and multitask well fit into kind of traditional definitions of education and learning and, and the results, the good guys, right? That's that. That's the kids who don't come to us. Those are the kids who don't have problems. Whereas kids who really maybe hyper-focused to the nth degree at the exclusion of really important things like the fire alarm going off, that's a bad thing. But maybe there's some attributes there that would really benefit and cross over into helping kids who, you know, in other words, I have, I've had, I had one guy say, you know, if Mo, if singular tasking, we're a superpower than I would be highly gifted, whereas I'm considered disabled in this world.

Seth Perler: Okay, so your superpower is sort of seeing,

Marlo Thurman: seeing the, all those shades of gray and the strengths that come from both systems and recognizing that sometimes our traditional education has really aligned more with one than the other.

Seth Perler: Awesome. And I want to ask a rhetorical question. Why, why is noticing these strengths in the gray areas so important?

Marlo Thurman: Um, all of us perform well when we are working within our strengths. And so we can hammer the deficits until we're blue in the face. But most of us, those deficits that we have when we were little, they continued to be the deficits we have as grown adults. And whereas strengths, if we develop those strengths, a lot of times those strengths allow us to compensate and overcome those deficit areas in really unique or uncharacteristic ways. So if we understand and develop the strengths that gives the ability to overcome the weaknesses where as we can beat on the weaknesses, but we might develop some new habits, but we, this, the deficit is probably still better.

Seth Perler: And what are some myths or misunderstandings that you see a lot with teachers and parents in terms of the traditional system and how we approach strengths and weaknesses?

Marlo Thurman: Um, as it relates to executive function in particular, it's this idea that being organized is somehow learned that in other words, kids are, you know, kids who are organized and who have good executive functioning skills are more well behaved. They're nicer, they're sweeter, they're just better people because they care enough to get themselves organized and pull it together. Where kids who have these executive functioning problems are, you know, kind of misbehave. They're not trying very hard. They're not applying themselves properly. They're not taking responsibility. So there's a lot of negative connotation that comes with internal disorganization, but that's pretty hardwired. And so our school systems really kind of make the assumption that being organized as a choice, when in fact it is always every most usually not a choice.

Seth Perler: Yup. I just finished a new um, uh, executive lungs from one Oh one course. I'm one of the topics is can't versus won't. And that's when they logged on to because there's so much misunderstanding around that. Marlo, I just love how you articulate yourself. You just, you put towards by d is so much better than I can. So I, I love listening to you. Um, yeah. Um, why does this matter to you?

Marlo Thurman: Um, in the general sense, um, I think we're losing kids and we're not losing small numbers of kids. We're losing large, large numbers of kids. We beat down their self esteem. They don't fit the school system. They're viewed from deficit models first without understanding their strengths. And by the time they get out of the school system, they're pretty injured to the point that I see, you know, and I've worked in the, you know, in the prison population, you look at the number of people who are in prison who probably could have been saved at young ages of someone just understood and took the time to really work with them, teach them their strengths. So there's, I just think from a, from a social, if you want to contribute and make the world a better place, we better start by getting more of the kids feeling successful and good about themselves and functioning in this world because there's too many just functional disenfranchise young people in our world today. And I don't think that has good outcomes for the whole of society. So it's kind of my calling. I feel like it's the only way I can, you know, it's the best way, not the only way, but the best way I can contribute to leaving a better world for my kids and my grandkids.

Seth Perler: So I'm going to ask you a question that I haven't asked anybody else on the summit. And I'm really interested in your view on this because I know all of us parents and teachers probably have these conversations with people and thoughts with people, but you know, if you had a magic wand and could make school Marloe or school system Marloe and like really, and this is such, I know cause I've thought about it and I think there's a lot of right answers to the question, but, uh, are there any sort of key concepts that, that you would change if you had a magic wand in terms of this?

Marlo Thurman: Well, you know, one question is my magic wand. I mean I use magic wand all the time, but um, and by the way, I kind of did get a magic go on. Cause if, I don't know, you know that history, but I, you know, I had that I had some money and I was able to kind of create the school of my dreams for about a decade. So in some ways it wasn't just by the way money is side, that was a really great model. So in other words, it's not like what I would wish for. It's what I tried and failed at and tried and succeeded at. So the answer is really that kids learn best by doing, they learn best by experiencing and they learn best by multisensory integration of concepts. So within that then that means that reading, writing, math, science, social studies, humanities, whatever subject we want to put in is best taught through applied kind of block theme based units where all this stuff ties together.

Marlo Thurman: Right now, so much of what we teach is just the disconnectedness of everything or the disassociation of everything. So in other words, we do math for 22 minutes and then we switch over and do reading and it's completely unrelated to what we're doing in math. And it's all sit still and listen and learn by listening to your teacher, reading something on paper and then producing something in writing. And that is not conducive to the world we live in. Um, it has been ever been conducive. The world we lived in during the factory model of education, it kind of was effective for the masses in terms of making sure we apply the bits and pieces of facts, but it's not conducive to how then you take your learning and apply that to the real world in which you live. And this is where I believe we have to get, you know, I'm not talking about little tiny tweaks in education. I'm

talking about an entire revolution where we throw out baby and the bath water and really start teaching not only from the position of what young people need to learn to be adults, but also from this position of applied conceptual theme based connectedness of ideas.

Seth Perler: Thank you. Now you have now the, the, what I was gonna follow up with is, um, you have these parents that are watching right now and are like, wow, love your answer. But the reality of my situation is not that is there anything a parent can do in their own personal lives and family lives and they're on their own time with their own energy to help, um, give kids these types of experiences that they may not be finding in school, but that can plant seeds, um, instill and support the kid and, and creating a great future.

Marlo Thurman: Well, simply put, if you don't live on a family farm, you better build a tinker space in your basement. I mean, kids need to be exploring and doing, um, we need to be doing a lot of management around sit time versus movement times. So in other words, so many of our kids just spend hours and hours of their life either behind a screen of a computer or behind the TV screen. And that means that they're not really learning. That's a pretty reinforcing system. They're not learning through failure. They're learning through rewards and successes. So, you know, decrease screen time, getting kids doing stuff, getting them back engaged with their community, getting them building, taking things apart. I mean old appliances, you know, let them take apart and figure out how things work by actually exploring and then really figuring out, okay, what is it that your child is especially interested in?

Marlo Thurman: And even if that seems like some quirky anomaly, that's something you should be developing. I mean, I have a daughter who, you know, fifth grade teacher was like, you know, you've got to send nontoxic ballpoint pens because she's drawing on all the other children. And she's now a very, very well known and very lucrative tattoo artists. I mean, she's booked out for a year in advance or the shop rate of like 300 bucks an hour as a tattoo artist. And I can't say that I supported that. She was just driven enough to do that kind of behind my back. But not all kids have that. A lot of times they need the support of their parents to develop those passions into usable and self-sustaining careers for themselves.

Seth Perler: Awesome. Thank you. Awesome answer. And to reiterate, not reiterate cause there's so much that you said, but I, I think the core is to build on those interests and strengths

Marlo Thurman: [inaudible] and find them something that they're doing as opposed to just sitting in watching and listening in their world in some way.

Seth Perler: Okay. All right. Let's dive into the executive function stuff a little bit more. What's your one sentence definition and then unpack that a little bit for us. And I know that

Marlo Thurman: you can't, you can't pay me down in one sentence or one word. I know I'm organized is the one word, but it's more than that. Um, it's the ability to, I

dunno, attend, remember sequence and act on signal is what I would call executive functioning

Seth Perler: and unpack that for us.

Marlo Thurman: So in other words, it starts with where, and by the way, and again, remember I have a bigger definition because I start way below that and I go even past that in a traditional that now. Yeah. Yeah. In a traditional sense, it's that ability to pay attention to the things that are important, not necessarily to the individual, but to the world. Right. In other words to the teachers, the parents or whatever. So in other words, we might have a kid who is attending to something that's really interesting, like the fly crawling up the wall, but that would be an off task thing. And that definition of school that we consider traditional. So it's attending to the things that those around them as value and being able to eliminate attention to those things that are not valuable to other people or to the situation in which we're in.

Marlo Thurman: And then from there it's remembering, it's being able to take from that attention the key elements that we then need to remember and store for further use. So in other words, I'm not paying attention to the fly, I'm paying attention to the spelling words in front of me, and I'm able to focus on the spelling words in such a way that I can store them and then pull them out later, either in my writing or I'm spelling tests. From there, it's then being able to organize multiple sets of memories and attention. So, in other words, I've got six, eight 12 things that I'm trying to process and I'm trying to sequence them in terms of order of priority, figuring out which thing I have to do first, which thing is less important, which then can wait to another day, or which thing I could put on the back burner.

Marlo Thurman: So it's the sequencing and organization of all of those pieces of information that we're trying to attend to and remember. And then from there it's the execution. So it's being able to specifically sit down and maybe write the spelling words out because I've been asked to do them right the mountain nine times. Because you know, that's the school's job and that's an important school job, even though I might find it completely unimportant, but that's what my teachers asked me to do. So I can apply my energy to the execution of that task, whether I find it particularly interesting or not because it's, it has value, then I'm actually delivering this end product in a way that meets the criteria of those people around me who are telling me what I need to do. And by the way, that's true for children or adults. And the reason these skills are important. I mean, I've kind of this them as kind of being unimportant as it relates to maybe nine times of the spelling list. But in the adult world, that's being able to listen to a boss instead of paying attention to the fly on the wall. It's being able to remember what the boss has told me to do. It's being able to then prioritize that job and get that job done. So then I get a paycheck. I

Seth Perler: think that's one of the hardest things for me in, in my work, is finding that because I don't lie to my kids, my, my clients that I work with, I'm sure you don't either. Like when they say, when am I ever gonna use this? If I really believe that, they probably won't. I might say, you know what? You're not. Um, or so, one of the hardest things about my job is I'm, I'm trying to get these kids to execute on

things that may not have meaning or maybe with a teacher that they feel doesn't even like them. So why? So I'm trying to, but it is more, and I'm really glad you said all this because it is for the reality of the world that we live in and, and we don't want our kids, I don't want my kids to be in a job that feels horrible like that, but there will be times even in the best job when they have to execute on things that they don't prefer that are non preferred in order to get the, the gist, you know, there's no utopia in order to get the, the main things that are important to them in their life, a good paycheck, having, you know, healthy relationships and, um, in a home and groceries and bills and freedom.

Seth Perler: And anyhow, so, but that is such a hard balance because sometimes, you know, we're looking at busy work and we're going, yeah, that is not what you need right now, but this is what is being asked of you. So that balance is really hard.

Marlo Thurman: And I think it comes down to that discussion of value. So in other words, you're exchanging valuable products with four other valuable things. So, in other words, you're changing what is valuable to somebody else for something that is valuable to you. And that's the way I explain to kids. So yeah, writing those spelling words nine times is not valuable to you at all. But being able to get, you know, a passing grade in this class so that you can then go on to college is valuable to you. So in other words, thinking about it as an exchange of valuable products with the understanding that you didn't choose that value for the other person and that why they chose that is sort of ridiculous, but you can't get in their head and understand why those nine spelling words are important. So it's just this exchange of value.

Seth Perler: Okay. Now you were sort of, I think starting with one definition and then I think you were going to sort of, now we have it, am I understanding correctly? We have sort of this generalized a helpful understanding, but there are things underneath the surface, behind the scenes that are really influencing a lot of this stuff that, that we're gonna unpack.

Marlo Thurman: Right. And by the way, let me clarify that in the literature, even if you look at the evidence based literature on executive functioning, there's literally two very distinct definitions and these two camps argue back and forth all the time and don't agree and I'm kind of siding with the the more comprehensive camp or that other camp. It's like, no, that's not exactly function. Not something else. But what I guess I'm really saying is that, and it's obvious if you're sick, you can't act on the value expectations of other people appropriately because you're physically ill. I mean that's not a really obvious starting place. So we start with physical health and that is very tied to then mental health.

Seth Perler: Do you want to back up to what those two camps are and clarify that? Yeah, yeah. The

Marlo Thurman: two camps are kind of my one sentence definition, which is attention, memory, organization and sequencing and execution. That's one cap and they're saying that is actually the definition of executive functioning. Whereas this other camp is saying that executive functioning is a neurophysiological response to the world. It's the ability to, to interact appropriately with the world from the base

point of Physi physiology, um, sensory processing, cognitive energy, and then all of the products that come out of that, which are, um, you know, feeling, feeling elated because you've done a great job feeling disappointed. So in other words, it's all those emotional products as well as how those emotional products then come back in and cycle around and affect the physiology and the mental health.

Marlo Thurman: Does that makes sense? A bigger whole cycle kind of a thing. And it really ties way back to, I mean it's that difference between the brain is the machine that we can dissect into little pieces versus kind of, you know, the neuropsychologist Charles Sherrington in his view as the, you know, it's so complex. It's like the universe maybe even bigger and we can't begin to break down just pieces and dissect them without understanding this more complex. He uses this, he uses this idea of a, of a loom that it's like this giant loom that has all these interconnections within it and that you can't really look at executive functioning singular from that bigger, broader, neurophysiological standpoint.

Seth Perler: Excellent. And so the way that I describe it is I talk about a wheel and there are all these spokes and I talk about spoke theory and people want it simplistic step by step. You know, we live in a culture that promises a lot of do this quick and easy fat, you know, that's so embedded. But this is not, I mean I present stuff in a step by step way, but the reality of the situation is to get a human being a child who is really struggling and we're really worried about them to a point where we're not worried about them and they're going to be okay. That journey for me to be is you have to attack it from all these different spokes, all these different areas. So, um, do you want to, do you want me to lead you in the asking at this point because, or do you want to keep going in the direction you were going?

Marlo Thurman: One thing I'd like to mention on that, and I think it's helpful to understand like how we got here as a society in terms of thinking about these things and it's really helpful to understand that so much of our thinking is based on this reductionist point of view that you know, we can disassemble and examine the parts and that really tied into, you know, some of the developmental stuff that every kid should be on this developmental stairstep kind of model and the kids who aren't, something's wrong with them,

Seth Perler: the standards grade levels

Marlo Thurman: and by the way, and then from there that really drove us into the behavioral and, and conditioning models, which still are very, very strong across much of education and teaching. This idea that children really are kind of an empty box and that if you apply the right of knowledge and teach the right behaviors that their happy, healthy adult people, and I am really opposed to that whole line of thinking. And by the way, the, you know, throughout this time we've also had kind of this whole view that neurophysiology is way, way more complex than we can even begin to think about it and sort of break it down. So in other words, it's helpful to understand where we've got to. And by the way, that person that persists because people want a quick fix, they want, it's like you said, they want five things they can do to cure this so their child will be more normal. But I guess I'd like to really kind of open up the rest of this conversation with this idea that what is so particularly wonderful about being normal [inaudible] awesome.

Seth Perler: Again, I wrote just really enjoy how you articulate things and, and this might be a good time to talk about

Marlo Thurman: the, the circle now, the Pi. Okay. So, and by the way, this is just one of several models when we think about how people are wired, but it's helpful to really first, and by the way, let me draw that back in because what we're really talking about is the energy required for executive functioning. So this is an energy model and it's based on this idea that really it's like a pie. We have energy for cognitive task thinking, we have energy for emotional and social or spiritual tasks, and we have physical energy. And those are kind of the three buckets. And they cross over a little, like it tastes some cognition to move your legs across the floor, but that those energies are very distinct and broken apart from one another. And we don't get to borrow from one to dip into another. So whenever we have depletion in one of those three categories that tips us into our physiological or biological reserve system, and let me use the physical one, for example.

Marlo Thurman: So let's say that somebody runs a marathon. Well, I mean, they run, you know, the five k and they're, they come away from that exhausted. It's going gonna take a pretty stressful situation to get them running again. Right? But if you know, wow, bear jumped out of the woods right at the end of the finish line, even though they were dragging to get across that finish line, they could push into that reserve to some degree to run from them that that Predator that is threatening their very life. And so we all have at our discretion to use really this kind of, and it's fueled through our adrenal system, but it's much more complicated physiologically that cause it's cortisol and it's, I mean it's a whole bunch of other things within that that I won't get into the medical definitions for. But it's really that energy is reserved for biological survival.

Marlo Thurman: It's not meant to be used in and out every day. So let's go back to the cognitive slice. A kid who has very poor executive functioning has to use all the lot, a lot more energy day in and day out to do these tasks that we consider actually executive functioning and that the valve and to meet those value demands of other people such that by the end of the day, that slice is kind of emptied out. And so for a lot of these kids, they're having to dip into kind of survival, biological reserve energy to keep going in across the school day or especially across the school year in products that it's pretty products that they can easily produce with the amount of energy the other kids or original energy is that essentially they're using this reserve energy and that activates in them some physiological responses that changes breathing, heartbeat, respiration, digestion. It changes some big things physiologically that then become the, the base for the next day's worth of executive [inaudible]

Seth Perler: functioning. Yeah. I'm one that one of the biggest misunderstandings I think that, um, uh, adults make around that particular area is when we say you need to try harder and they don't see that it does requires so much more energy for kids who struggle with this stuff to do the same things. Right. And then that shame obviously then taps into more of the this emotional energy like that that hurts deeply, especially time after time after time. And these kids really get jaded.

Marlo Thurman: Well, no, and the, the slices of the pie are really helpful too because very often we have a kid who is cognitively spent, but they have, they're saying, oh, I'm so tired. Like, yeah, I'll do my hour ago, blah, blah blah. And then you look out the window on, they're running around playing with your friends and you're like, wait a minute, you're obviously not tired. So that's where that distinction comes to understand that you can be physically really, really rest it or have a surplus of energy even though you're mentally too tired to do your homework. And still the parents feel like they're being deceived because their kid has told them how tired they are and now they're not running around with their friends or on the phone with their friends. And so, like I say, it is, I mean it's, it's, it's human nature to trust what we see. And when you see a kid who doesn't look tired at all, so how can he be too tired? He did his homework.

Seth Perler: Now when I discuss this sort of a model, I talk about social, emotional, physical and cognitive. So I break it into these four parts and then, um, I look at it is you have a certain amount of an energy. I, when I talk about it, I talk about you have a hundred points of energy, let's say. And after that you get into the reserves. This is all stolen from you. I've just put twist on it. But yeah,

Marlo Thurman: I stole it from the, the, the brain injury literature actually. So yeah, it's not even mine. I don't even claim it.

Seth Perler: Well, it's fantastic. And, and, um, so we have these different areas and once we pass our sort of daily, um, uh, it's like a battery that's gone in.

Marlo Thurman: See a lot. Men are a lot. Men Are our buckets. Yeah. Yeah.

Seth Perler: Then we start getting into the reserves and I want to ask you about the reserves in a minute, but before I ask you what Ha, what reserves are, I want to ask you, are there ways that we seem to replenish? Because that's one of the things that I, I'll kind of talk about. Okay. You, you can be, let's say, let's just use the example of an introvert who's exhausted by social interaction, but you do have some people that really fill you up and you get to spend time with one of those people that fill you up and it's like, it almost recharges it. So you, I'm just saying, I guess that it hits more than just a hundred points that you just used. It seems like the, uh, they're able to sort of, there are things that that can feed it and things that can take from it. Like you, you going to exercise depletes you, but it also invigorates you in. And how can you speak to that?

Marlo Thurman: Yeah, so now I will, I am, and that doesn't mean you're wrong, but I would argue that social energy does, it feels your social bucket, but it doesn't fill your cognitive bucket. Does that make sense? Now in the truest sense, and again, I took my model from the the brain injury literature and in the truest sense, each of these buckets, all of them are truly refueled by three things, eating, sleeping, and respirating. Okay? So in other words, that's the really simple answer. Now, it's a lot more complicated than that though, because what we find is that there is something that is related to interest and passion. In other words, we can be eggs, Zostavax, but find something that's truly interesting and passionate to us and we can now find some energy that doesn't seem to exist. So there's something that's not explained in the literature with connecting to a deep

interest or something that we feel really passionate about that seems like a borrowed magic energy.

Marlo Thurman: Now there's no good, and I've researched this and it, there's no good explanation for that. So what you're really talking about is that social interaction where we feel refueled and what that does is makes us feel energized such that we can do other things better. And there's probably some to be truthful about what's really going on is there's probably a lot more physiology in terms of neurochemistry related that we're not putting into this model. In other words, you know, get some dope amine going because we're having this social interaction and then the doping mean response is actually clearing up some of our energy depletion that we have in our cognitive buckets. So in other words, it doesn't have an easy answer, but when I teach it, I teach it from the perspective of four pieces. It's how to breathe in deep, relaxing, energizing breaths. It's how to make sure you're getting restful rejuvenating sleep versus adrenal activated sleep. And it's how to fuel your body with nutrition and food. And by the way, exercise spills over because we're oxygenating when we exercise, we're going to [inaudible] oxygen. So I teach it from that perspective, which then ties me into teaching up from the standpoint of how we do those things while we're attending to sensory stimuli and sensory regulation. And so then it moves into kind of sensory diet from there.

Seth Perler: Awesome. Let's dive into that in a minute too. Um, I want to reel it back in for a moment. For people who are watching in terms of that the purpose of this model is not to memorize this model. Um, the purpose of what Marlo is teaching is to be able to look at your child who's struggling with stuff and be able to say, okay, where is the energy going and what can we do about it? Correct. Okay. So let's talk a m before you get into the sensory stuff. Let's talk about, um, the um, uh, reserves.

Marlo Thurman: Okay. And what would you like to know about them? I mean, we understand their biological survival in other words,

Seth Perler: depends when we go into reserves day after day, week after week, you've got a student who keeps going, you know, pass their, um, thresholds and all these buckets.

Marlo Thurman: Well, physiologically we know clearly what happens. I mean, the body immediately starts changing the way it respirators, the cells. So in other words, we're pumping blood to hands and feet instead of two internal organs such that the oxygen is preparing us tough fight or run. Correct. So in other words, literally oxygen and blood flow change as the, one of the first thing that's actually the first thing that changes is the breath response changes to be very high and tight. So to stop

Seth Perler: see this visually, if they're attuned to the child.

Marlo Thurman: Right. And so in other words, it's, these can't get his whole sentence out because they have to take a breath and you see that in terms of their breathing. So the breathing response changes to the point that they don't take these really

full long breath. They're breathing really high, tight and shallow, and we can see that in them in the way they posturely hold themselves. Um, from there it changes the respiration and the blood flow and immediately pulls blood flow away from the stomach. So in other words, um, they're not as hungry or if they're hungry, they want to eat straight carbs. Sugar off a spoon sounds really good to them. So in other words, it's fast fuel, easy to die, does and hard to digest. Complex carbohydrates, grains, proteins that are hard to digest and take longer to digest, sit in the gut and don't do much for the body.

Marlo Thurman: And then the other thing that happens is we don't. So in other words, physiologically, when we're in that kind of adrenal activation, we don't carefully, slowly break down the nutrients from our food. We dump the bulk of that out, we pull those fast fuels reserves out, and then we dump the rest of that and leave the intestines to try to break that down and they don't have the capacity to then this is where we get a lot of, you know, food allergies, food sensitivities, stomach aches, which in turn results in headaches because we're not getting proper nutrition. And so much of our emotional response or Serotonin in particular, is produced in the stomach. So then that changes the mental health. So in, in other words, we immediately get a kid who's not physically functioning for longterm sustainability. They're physically functioning for short term to get through this crisis and get through tomorrow.

Marlo Thurman: Now you can only do that for a while until the body has had enough. And the brain from a neurotransmitter standpoint, literally kicks a depressive response because that turns off this heightened activation in the brain that is told us that we're in a, you know, it's a panic mode. You can only be in panic mode for so long until you neurochemically correct that by turning on a depressive response, which makes it so you don't want to do anything. You don't want to eat anything. You don't want to take on any new information, you just want to be left alone. And so those things are very much tied up with the underpinnings of the physiology.

Seth Perler: And can you speak to how a lot of adults, uh, maybe running on reserves all the time and don't even know it and how that can model or impact or reflect, uh, with, or impact kids?

Marlo Thurman: Well, um, you know, we're raised to be kind of responsive to the moment. In other words, so much of the world we live in is this fast, fast as I'm, you think about am I, and I'm, I'm a little older than you or maybe even a lot older than you, but I remember, you know, growing up on a farm in Wyoming with three TV channels and what that meant is there wasn't that much fast positive. The thought we had a phone that, you know, if you weren't in the house and the wall ring, you didn't have a phone to deal with, you left your phone and you drove to somebodies house to talk to them. I mean, you think about all of that and how that's really changed the amount of attention, which then requires it remembering and sequencing and filtering and all of the executive functioning skills.

Marlo Thurman: We've really changed to a society that is demanding of our very short term, immediate response. And what that does is kind of has the tendency to keep us

in a heightened state of activation. And so, you know, people who are a little bit older, remember when it was a quieter, calmer place to live. Whereas, you know, young parents, most parents of the kids or enough younger, you know, they've had computers pretty much their whole lives. They've had, you know, 52 channels of television. And I mean I'm not just saying TV and you know, Internet, I'm saying the entire world changed during that same period of time. And so the products that are demanded of us are so immediate. You know, we used to be, I answered the phone and listen to a message. Maybe if we were lucky to have caller id or messaging and got back to them in three or four days.

Marlo Thurman: Now we're expected, you know, within five minutes to come up with a response. And so that stress response is kind of part of this world that we've created. And so I think many people don't even know why they feel the way they do, but they're constantly responding. They're constantly in a state of sensory input response to the point that they're activated a little bit all the time. And I think this is why we're seeing all the digestive issues we're seeing. In other words, you know, the majority of the population is on some kind of a weird diet now because they can't digest, digest this or digest that because their physiology can't keep up with the world that we live in.

Seth Perler: So Magic Wand Land, you have magic wand for a parent who's watching and you can give them a book or an action to take, or a meditation or or whatever supplement, I don't know. But what, what, what's a, a quick one,

Marlo Thurman: a really quick one is fine sometime for quiet and then notice how you feel. In other words, if it's completely quiet and there's no stimulation, are you comfortable or are you seeking? And if you're seeking, that means you've got your adrenals pretty hot. Most of us should be pretty content to set for a few minutes in peace and quiet and enjoy peace and quiet without, you know, feeling like the other shoe's going to drop any second.

Seth Perler: That is, that is such a helpful tip. That's, I love that. That's so good. Okay. All right. So then, um, are we ready to get into the sensory stuff?

Marlo Thurman: Yeah, if you'd like.

Seth Perler: [inaudible] yeah, let's do a little bit of a background on that. What we need to know and then we'll go and really dive into actions.

Marlo Thurman: Okay. Sounds good. Well, the first thing to know is that the sensory system is fueled through your physiology. So in other words, the amount of information you try to take in is based on two things. It's based on your innate cognitive ability. So bright people really do take in more information. That's just part of the equation. And then it's based on your activation levels. So in other words, the, the Adrenal, yeah. And by the way, we need some activation all the time or we'd be dead or asleep, right? So we have to have a certain amount of what we call arousal or activation in our system to be awake and alert. Now with the sensory system, we can actually tell full to understand it kind of lives on a pendulum and we can swing very far between the states of too much and too little. Okay. So from a sensory standpoint, things can be too loud or they can be

too quiet. There can be too much visual stimulation or too little. And there's, and what we're shooting for is to be kind of in the middle and we know are in the middle when the information is not so much that it makes us feel anxious, but it's not so little that it makes us feel border to doubt. So in other words, you want kind of this right amount of information that is both calming and alerting.

Marlo Thurman: And it is different. And by the way, it's not, it's only different for everyone, but there's not like, it's not like this pendulum is one thing. It's like here's your visual, here's your auditory, here's your, and they get going like this. Right? So in other words, a kid can be really auditorily, overstimulated at the same time that they're visually under-stimulated. Okay. All right. So we each have kind of a profile of, of swaying in which we liked to function, but our adrenal system and more specifically the amount of energy we have. So how tired we are affects how overstimulate or under stimulating something's going to be. And by the way, underneath of that, how healthy we are, how nourished we are, how far into our reserves we are. All of those things play within that. But kind of on the simple term we can say, okay, well you know I can do my work pretty well with the TV on in the background until I'm tired and then I have to go and turn that TV off because now I can't concentrate on my work because now it's dragging from my energy system. Does that make sense? Okay.

Seth Perler: The challenge even know these things ourselves as adults and how what we pile on the plates of kids and in our expectations of them is so overwhelming. And then we really don't empower kids with this sort of information about themselves to start learning self reflection and self awareness and mindfulness to develop an understanding of how they can regulate these things in their own right.

Marlo Thurman: And by the way, let's be clear that overstimulation leads to anxiety, which increases your adrenal activation, which causes you to seek more overstimulation. In other words, it's a self fueling system under stimulation causes you to be bored, causes you to be tune out, causes you to then not pay attention to other stimulant stimulation to the point that now you can't regulate and activate on important tasks because your sensory system is not, you're not alert. Does that make sense? So in other words, the social, emotional, that mental health, all those other systems are kind of working in conjunction near this sensory system which is tied so closely to the physiology that it gets to be really complicated. Now that's the big picture version. The simple picture version. Is that really remembering that it's either too much or too little and if it's too much then we back it off and if it's too little we bump it up.

Seth Perler: Excellent. So then that begs the question, what do parents do with this information?

Marlo Thurman: A lot of times it's really hot. Now the good news we have, this is so complex that to figure it out, you know, just with the magic, you know it's like our crystal ball. But the good news is that the a child sensory system speaks to us through their behaviors. So what that means is the child who is overstimulated with auditory information might be covering their ears. They might be blocking out by going hook a blah, blah, blah, blah, blah, blah, blah, blah, blah, blah. They're making all

these noises. Okay. They want to listen to their music when they're working. They want to two things out there. You know, they might be, even to the extreme of an autistic kid, they might be stemming with auditory stimulation or making auditory stems. So in other words, we can watch children's behaviors to get some read on what they need from a sensory processing standpoint.

Marlo Thurman: So a kid has got, you know, their hair down over their eyes or they're wearing a hat or they're kind of covered up or they want to work under the desk. That's a kid who's overstimulated that tells us we need to clean up the sensory world for them. So they're not getting so much visual overload. A kid who's covering their ears or making noise or complaining of noise or seems really tuned out and inattentive in noise, that's a kid that we can actually work on getting them some filters or noise canceling headphones or so. In other words, once we understand some of those behaviors, then we can do a better job of providing some accommodations around that. And by the way, now I, this is where I use my magic wand is I'll ask a kid, magic wand, tell me anything you want to change at school and guess what? Their sensory issues are going to be on that list. And they'll tell you exactly what they need if you'll listen,

Seth Perler: if you listen. Yeah. I think that one of the, one of the complexities of this issue is how we, you tie in all the parents and adults watching have grown up with so much shame about how we are supposed to be. So a kid tear is in front of it and we're like, why are you covering your face? Or I don't know what your, your parents or family or teachers were like. But a lot of the people watching them, sure do things like that. Why do you your hood all the time? Stop doing that. Or, you know, we, we, I, I don't know if I'm giving a good spectrum of the messages, but a lot of times our messaging is something about you need to change what you're doing cause it's disrespectful or it's this or that. It's, there's a judgment around it. Rather than looking at the kid and saying, hmm, what's going on? Or asking what's going on in listening, which is not an overnight matter, like you've had fears of being hit and patterning with your family and to change these patterns. You know, again, it's the spokes. There's so many, um, uh, ways to approach it. I don't want to overwhelm people watching, but I want people to know, first of all, it's okay and do something, you know? Right. But, uh, I'm excited to hear more about how you unpack some of those things.

Marlo Thurman: Well, there's a really interesting model and it's actually, the autism community uses it pretty extensively and it's came through neurodiversity. So it started out with kind of this whole neurodiversity movement.

Seth Perler: Do you want to define that real quick?

Marlo Thurman: Yeah. Neurodiversity means that actually the original paper compared human differences, cognitive differences to differences across species, you know, within the ecosystem of the planet with this concept that neurodiversity might be as important to the sustainability of our wife on this planet as the biodiversity of multiple species is too though that the sustainability of the planet. So in other words, differences, good put simply, the difference is not only good, but it might be really necessary for problem solving of the future. So within that they did

some research on what's on a, on a theme called Niche construction. And what that means is that within niche construction, that you're building a

Marlo Thurman: academic kind of sensory world for an individual that works for them in which they have success and that then see what happens. And within that literature, what they really found is that when you attend to the individual learning styles, the strengths, the interests, the sensory needs, the social emotional needs, and that these individuals started feeling successful within this constructed niche, that then they were able to reconstruct that niche for themselves in other settings and generalize that success into other settings. And so in other words, if we create a proper niche for a child in school, then in their adult life, they'll know what they need and be able to create that niche and be successful for themselves later on.

Seth Perler: It's so good.

Marlo Thurman: So that's really what we do then that's our, that's our ticket, right? Is to listen closely enough to be able to create individual niche construction for these kids and then teach them what that is. And that starts with hearing their voice and then saying, okay, well I know you're really sensitive to the tags in your clothes so we can cut all those out. We could teach your skin to better handle those tags. Or You could be in a position where you choose your own tag free clothing for the purpose of knowing that that's energy that you don't need to waste on tags. So you know, that's something we can do to help you. And by the way, to not use up your energy on unnecessary things so that you can use your energy, that bucket, that slim bucket that you have. You can use it for the, for the value products that are important to yourself and others as opposed to, you know, on the bumps in your socks or the tags on your clothes. Are the neighbor's dog barking.

Seth Perler: Awesome. So I'm going to start wrapping up in a minute and I'll be five to 10 minutes. But if we're, we get to that, is there anything, ah, pretty key that you wanna mention?

Marlo Thurman: Um, I always tell parents that you should start with the energy game. In other words, you can't do anything. Tutoring, mentoring, enrichment, combination. You can't start with anything until you have a rusted, healthy kid.

Seth Perler: Okay. Let me interrupt you for a reason. Okay. So where I was going, this fits into, so I'm just going to set the stage and then we'll dive in. All right. So as we wrap up, we've got this parent, the parent is concerned about their child and we want to take them from point a to point B where they're like, okay my kid's good. You've worked with so many kids, you've seen kids who have been able to transform their lives, families have transformed. You've seen kids that haven't been able to, and the whole spectrum, when you've seen somebody who's really gone from that point a the family or the kid, or you can talk about both together cause they're obviously involved and you've really seen them. Ha have that transformation. What steps of what or what processes are with things I've had to take place to create that. And now we get into what you were just starting to say.

Marlo Thurman: Yeah. And for some kids they're not physically sick yet, but if a kid is not sleeping, they're not digesting, they're not respirating. That's where we have to start. Nothing else is going to work

Seth Perler: that base foundational,

Marlo Thurman: physical health. Um, and then directly following that is their mental health. So if they're, you know, clinically depressed, they're suicidal, they're cutting their, um, you know, have, you know, delusions of shooting people. I mean these are things that need to be addressed next. And by the way, very often we're not doing that in a really healthy way because we're just then tackling only the mental health without the physical health and the other other stuff. In other words, it's your wheel. It's all those spokes have to kind of come together. But we start by getting our kids physically. And by the way it's sequential either because we are trying to get them healthy but they still have to go to school. And so then we're dealing with the teachers. So it is physical help, social, emotional, mental health and academic health. And those are kind of the three variables. Cause if all three of those things are working pretty good, then you have a pretty reasonably healthy intact kid. And so while we're dealing with the physical, we might be working, you know, this is where assessment comes in. We might be doing an assessment to figure out where all the is bleeding off in terms of cognitive or learning disabilities.

Seth Perler: Okay, so let me stop you there. So parents are watching, the first thing they want to do is sort of get that assessment of the buckets so that

Marlo Thurman: so physically ill that they really shouldn't be tested now or mentally ill that they really shouldn't be tested now. And that's why I say the physical and the mental health have to be at least functioning well enough that you're getting accurate read off of your cognitive assessment.

Seth Perler: So how, how, where do they go or what do they read or what do they do you know if you're consulting with them, what are you having them do to, to sort of get the cause first it sounds like they have to have a good picture of what the heck is going on. Then they can start doing something with that picture. How do they get that picture?

Marlo Thurman: Well and again, assuming that the kid is sleeping, that the kid is eating some meals and they're not just living on, you know, like one soul food, like chicken nuggets and that we feel like we've got them cognitively to a place that at least is kind of their current normal. Then that's where I do jump in and provide a comprehensive assessment. Really look at all of those variables and how they're interacting from that assessment. The next step is really to drive through a written, some type of written documentation, drive products into the school that demand, you know, for change within the school. So in other words that we're actually doing that kind of niche construction under either section five oh four or special ed law, which allows for accommodations, modifications and services to adapt what's happening in the classroom. So in other words, it's, you know, healthy. They're not mentally, you know, they're not suicidal. Now we can do an assessment. Once we do an assessment, we can start getting the school

piece working. Once the school piece is working, then it's re-introducing passions, strengths and interests and developing those. While we might be also doing some remedial supports and therapies to tailor and bring those skills that are super low up to speed so that they're not bleeding so heavily out those weakness areas.

Seth Perler: That's so good. Uh, I can just see people hearing that and still not knowing what to read or where to go or how do you get started on this journey?

Marlo Thurman: Um, that's a tip. That's a tricky question because lace, they act different levels, but anytime I've got a kid who is physically not well or mentally not well, my first step is to introduce a parent who the field of biomedicine and that is a relatively new American Medical Association approved endorsement for physical, for physicians to actually treat the physical conditions of neurocognitive impairments in kids. And that was when I say relatively new, I'm like 2015 is when the American Medical Association approved board certification for those docs. So I'm actually hooking those parents to functional or biomedical doctors to kind of deal with the physical and the mental health. Um, the second thing is really hooking them to say an occupational therapist who can really help get that sensory spin. You know, get that profile kind of captured and narrowed down. And very often that's not a base OT. It's an OT who has a master's or even a phd because they don't really get into sensory processing therapies until those higher levels of education.

Marlo Thurman: So it's not your run of the mill, you know, your insurance covers the Zoete to come and do some the hand therapy or teach your kid how to write. It's those high, high level trained, um, occupational therapists who can nail down that sensory diet or sensory profile for the purpose of creating a sensory dye, which then becomes the foundation for that niche construction that I talked about. And then from this, from the third piece, it's really understanding your rights under section five Oh four of the Americans with disabilities act or the Ada. And then also understanding special ed law and understanding your rights for accommodations for your kid and being able to appropriately, um, then, you know, I know what to advocate for. And that's, that's getting involved with someone like myself who can give you the words, who can give you the test results, who can say, okay, you're asking for these nine things in the classroom and if you can't get them done, I'll go with you.

Marlo Thurman: So in other words, it's kind of those three levels of support I think are where we get the most help in. Those all have pretty good literature base behind them. Stuff you want to research, sensory processing for gifted kids. There's lots of literature on that. If you want to research, um, physiological issues with kids with depression, there's lots of studies to read on that. So in other words, there's lots of, it's almost like there's too much and filtering them down to specifics is more helpful than giving them, you know, the 5,000, you know, the 5,000 article reference lists.

Seth Perler: That was really good that, that, that I think that's what I was looking forward. That perhaps that up perfectly. Awesome. Okay, I got two more questions and we're done. You Ready? Perfect. Um, what specific action, and I think you kind of

maybe just answered that, but what specific action, uh, comparing to take this week to get started helping their child with, with, uh, things that fit into your expertise?

Marlo Thurman: Um, this may surprise you, but my very first and most important recommendation is play with your kid. No matter how old they are, play with them, figure out what they're interested in and find a way to interact with them in play. Play is such a phenomenal teacher. It gives us the reason to respire it gives us the reason to use our bodies. It expands our sensory processing and improves our health. It's a passion and interest driven. In other words, it's a win win. So that's top of the list. And then I think secondary, we've heard a lot of already, it's really, you know, starting from the position of energy and recognizing that if your kid is so wiped out by Thursday that you're always having a behavioral meltdown on Thursday afternoon, that you've got to play a different energy game and figure out where the third pleading or shorten up their day or short enough some of the activities of their days so they're not [inaudible].

Seth Perler: I will mention this, one of my biggest recommendations in terms of that interestingly with a particularly with high school kids or college kids is to drop a class. Yeah. If you think about how much energy is needed for one class, if you have a class, an hour, a day, an hour of homework, that's two hours a day, five days a week, 180 school days a year, all of those hours combined. It's so much, and I want my kids and I'm not just saying everybody watching this, go drop a class and think about it, but all of my kids, they're played as piled so high. I want them to be successful on a few things. And then we can build from there rather than let's get, you know, everything under control that we have now. So sometimes that, anyhow,

Marlo Thurman: well I know what you're really, what you're really saying stuff is play the energy game well and understanding that if you've got a kid in triage that you've got to stop the bleeding. And so, you know, I've got, when I have kids that are suicidal, as long as we can keep a 24 hour watch on them, I'll put them in bed for three days, no computers, no screens of any kind. But you can do whichever you want for three days. And I'll keep kids from having to go into the hospital because all of a sudden that rest just pulls them out of that depressive cycle. So they're no longer suicidal. So even really, really serious issues can sometimes, and by the way, it's true for all of us. Things like pretty bad when you're white to get a date, get a good night's rest, and all of a sudden the world looks a little better.

Seth Perler: That's actually, well, kind of what we're talking about before we even started the inner [inaudible] today. Yeah. Correct. And this is the last question from your heart to the heart of the parents are watching right now. If you're really concerned here, what's the most important takeaway you hope people leave with?

Marlo Thurman: Um, I'm a mother of a 25 and a 27 year old adult. Um, the time flies and what I can honestly tell you is all of the things that seem really important are not going to feel that important one. They're not living at home anymore. And so those moments, those playful times, those things that you really enjoyed, those

activities for you and your kid, we're really connected. Those are going to be the only things you remember all this crap that you feel all of your hours of days of weeks is going to be weirdly in some kind of void that you kind of hardly remember as an adult. And the other thing I would say with that is, yeah, but yeah, but Marlo, what of these, it's amazing how these kids kind of turn out if they have self esteem, if they have positive experiences, that you have a good relationship with them. All this stuff that seems so important probably is pretty far down the list. And that sounds kind of crazy, and I had some rough years with my teenage kids, really rough years with my teenage kids, but the reality is that if you can focus on those strengths and really develop those interests and keep the school system from really destroying them and to what you can, in the meantime, you're probably, it's probably gonna work out.

Seth Perler: Thank you so much, Marlo. I really appreciate you, your time and your energy into this and everything that you've shared.

Marlo Thurman: Thank you. It was a pleasure.

Seth Perler: All right. All right, everybody go take action. We'll see you in the next one. Take care.