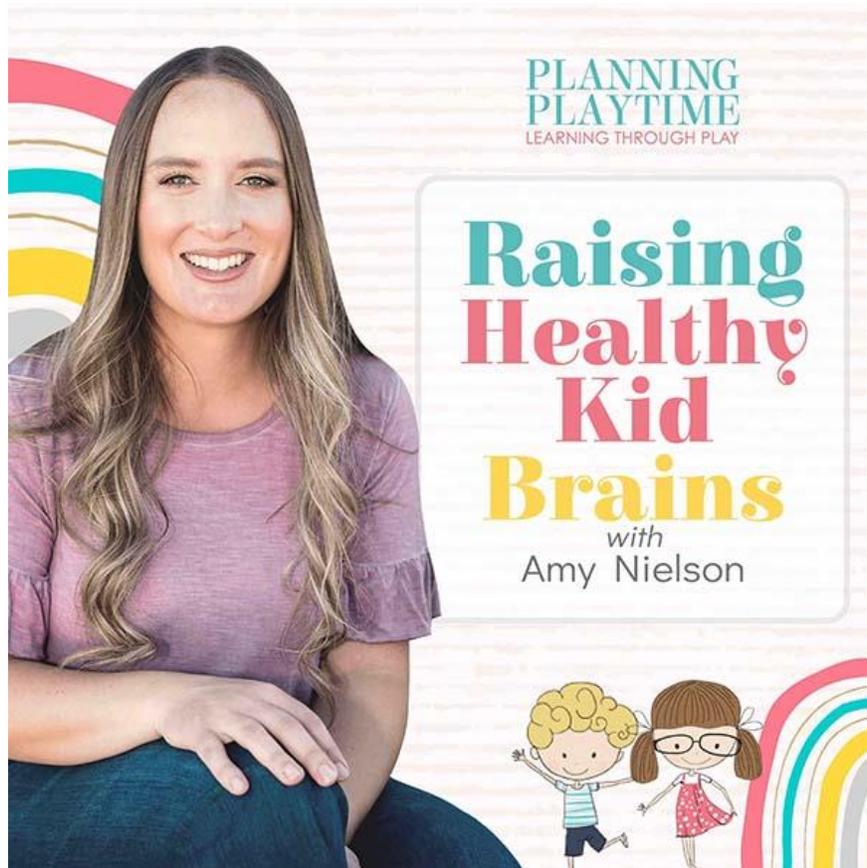


Ep #11: Gross Motor Skill Development with Margaret Rice



Full Episode Transcript

With Your Host

Amy Nielson

Ep #11: Gross Motor Skill Development with Margaret Rice

I think we can all agree that movement is important, but how does it affect a child's brain today?

I'm talking with Margaret Rice, she's a pediatric physical therapist and she's going to talk to us about movement in children, why it's so important for them to be ready for school, how it helps them with self-regulation, how it helps them develop body awareness and why that matters.

And she's going to tell us and give us some tips about how to incorporate movement in with learning, which is a lot of fun. And she even included a special gift for you.

So you're going to want to listen to this episode and then you're going to want to head over and grab her free printable. We'll give you all the information here in the show.

I can't wait for you to listen to our conversation. It's coming up right after this.

Welcome to the *Raising Healthy Kid Brains* podcast where moms and teachers come to learn all about kids' brains, how they work, how they learn, how they grow and simple tips and tricks for raising the most resilient, kind, smart, compassionate kids we can. All while having lots of grace and compassion for ourselves because you know what? We all really need and deserve that too. I am your host, Amy Nielson. Let's get ready to start the show.

Amy: Margaret Rice, welcome to the show.

Margaret: Hi, how are you today? Happy to be here.

Amy: I am so excited to have you on to talk about movement. And I just feel like this is such an important part of childhood. And I'm excited to learn about how it impacts the brain.

Margaret: For sure, I'm happy that you have me on today, a physical therapist so this is kind of my wheelhouse. I'm a pediatric physical therapist. My experience

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has been from birth through 21 predominantly and where our goals have always been to encourage gross motor skill development coordination skills, balance, body awareness, self-regulation. All those great things that affect learning and the brain and what children are really meant to do, to move to learn. So I'm happy to be here to discuss this topic with you.

Amy: I love it, I'm so excited. So tell me just for if anybody isn't aware of what gross motor is, can you just define what gross motor is for us?

Margaret: Sure. Those are the large motor activities that we do. From birth we're talking about rolling over, sitting up, crawling, walking, running, jumping, hopping, skipping. And then we move down the line into sports, athletics, all of those things require gross motor skills. They are gross motor skills.

Amy: I love it. Okay, so that's good to know. Alright, so tell me, what do pediatric physical therapists do, kind of what is your role?

Margaret: Sure. We work with children from the NICU all the way up to young adults. So with babies, the role is to encourage like I said, gross motor skill development. And then throughout preschool and school-age children, we work towards encouraging independence in the educational environment if you're a school-based physical therapist. So you'll work on motor skills that will affect their ability to participate in the educational environment.

And if you're a physical therapist that might work in an outpatient clinic or a hospital setting you might be more following a medical-based model. And you're helping children maybe recover from a traumatic brain injury, children with cerebral palsy, diagnoses of that nature where we again help them and encourage independence in their motor skills.

Amy: I love it. Okay, so talk to me about physical play and you talked about when we were talking earlier about how important that is to be ready for school and how important that is in school. Can you tell me a little bit about the research around that and why physical play is important to be ready for school and even in school?

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Margaret: Yeah, sure. This is again a topic that's near and dear to my heart because before children enter school they need so many hours, countless hours of physical activity in order to develop those skills that they need to participate at school. So for example we develop our muscles, what we say in the medical field, you first develop them proximally and then they go distally. And proximally are your trunk muscles, your belly, your back, your neck, your shoulders, your hips. And then your distal muscles are your fingers, your feet.

And we need to have stability in our trunk muscles in order to use our hands. Of course, when we attend school, that's what children are doing a lot of, maybe they're doing handwriting tasks or keyboarding, things that require stability. And the way that kids build up that stability is through physical play and physical activity during those early years. It's really hard to show up in kindergarten if you've never developed those muscle skills to the best of your body's ability then can make it hard for those fine motor tasks like writing, cutting, pasting, gluing if we haven't done that physical play prior to entering kindergarten and up.

Amy: Interesting. So the gross motor skills actually help you develop fine motor skills and support your fine motor skills?

Margaret: Correct. And if you think of how a baby develops, that's what we see. When a baby is born you're going to start to roll over. You're going to start to crawl and weight bear through your hands and your shoulders are getting that muscle, that proprioceptive input, that muscle strengthening. Then you're going to kneel. Then you're going to cruise. Then you're going to walk and all of those things lead to more fine motor activities that children can do. But obviously, babies aren't born picking up cheerios. So that's why you work towards that and that stability that they're able to then pick up small objects.

Amy: I love it. Okay, that's so good to know. So in addition to that you talked about the importance of how physical movement impacts learning and sensory preferences, self-regulation. Talk to me about that because I mean, yeah, we're all on board, fine motor skills are important. We know why those are important and gross motor helps with that but how does it help with these other things?

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Margaret: Yeah, sure. When children have that physical play they're taking in all of that sensory input and I'm talking about tactile input. Maybe they're touching things, proprioceptive input which I mentioned previously. This is kind of heavy work that gives our muscles the message to warm up, we need to be stable. We need to be ready to do this skill. So that might be things like pushing and pulling a wagon, pushing a laundry basket full of toys that they have. So those are kind of proprioceptive activities.

We have vestibular activities where children are processing where their head's moving in space, things like spinning and how they're navigating their environment. And the way that you build that up that's in your inner ear, is through movement. Swinging is an example of very vestibular input that a child gets. And because your head is moving through space your inner ear is moving and they're working on keeping their body stable on the swing and keeping themselves upright on the swing. And they're getting that message from their brain. So those are some of the main.

And of course, there's auditory stimulation where they're listening, visual input where they're looking at things, smell and taste. And so all of those sensory preferences as children play they start to learn what helps their bodies get ready to learn and what may make it harder for their bodies to get ready to learn. So this is an example as an adult. If you're sitting in a classroom and someone's playing music outside the window you can get very distracted by that auditory stimulation.

And so kids learn that and they'll figure out if I go and maybe I go on the swing for five minutes and my body's getting regulated. And it's kind of calming me down. I like it. And then I come off and maybe now is a good time I'm going to go sit underneath a tree and read a book. They see, okay, now I'm ready for a more quiet activity. Some children might go on the swing and get off the swing and be much more energetic and the last thing they want to do is go sit and read a book. And now they're ready to go climb all the playground equipment or run around the yard.

So when we allow them those opportunities in those early years it gives their body and their mind excellent feedback as what does work for me? And we see

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it as parents or educators that if they have a lot of outdoor time that day we're always saying things like, "They'll sleep good tonight." Because we know they had a lot of physical activity that day and that's what their body needs when they're young.

And so when they learn that when they're younger it can really be beneficial when they arrive at school. Because then they can use some of those techniques themselves that they've independently learned to get their minds ready to take in all that information that they need to take in from their educators and their peers.

Amy: Interesting. So is there something that we do as parents or as educators, is there words that we use or phrases to kind of help children start to be aware of that? I feel maybe some of it's habit-making on a subconscious level but is there something we do to help heighten their awareness around it so they're noticing those things? I don't know, do you have anything like that?

Margaret: Yeah. So what we call that is coregulation. So there's self-regulation where they're learning it themselves and then there's coregulation where maybe an adult may sit next to a child. Let's say they're having a behavioral or emotional meltdown. And it's awfully hard to, as we know, talk to a child if they're really having a hard time. I mean we're just going to sit next to them then they calm down. And we can talk and self-reflect on what kind of made you feel that way and what would make you feel better the next time or do you think you could have done something differently?

And you can help them self-reflect on that prior incident and discuss about what they were doing beforehand, what was their body feeling like and how they can make a different decision the next time and maybe have a better outcome.

Amy: I love that. So just noticing and having that. So good. You used the phrase, 'you need to regulate before you can educate'. Tell me about that a little bit.

Margaret: For sure. I think it's very hard, just so we talked about the sensory preferences or distractions that we can have. If we're not self-regulated and ready to learn it's awfully hard to take in information. Sometimes we say in the

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therapy world if your engines are running too fast or your engines are running too slow you really need a just right engine and state of mind. So that scale of self-regulation is so important to know, okay, I'm ready, my body's ready and I can take in that information.

And this is why we have recess in school, we know this. That there's significant benefits to recess. That children get that energy out. It helps to get them in a state of okay, I'm in a just right state now where I can take in information. Our brains are not meant to take in information all day long. So we need those kinds of breaks to help us to self-regulate. I mean even as an adult we can't sit and work at a desk for eight hours straight, we'll fall asleep. We'll have horrible posture. We have to get up. We take breaks.

Our brain, we need a mental break and we need a physical break and it's really the same exact thing for our kids. We don't always think of it that way but it's really important in order for them to learn that skill of self-regulation at an early age.

Amy: So good. So if I'm thinking beyond recess because those are kind of sporadic throughout the day or sometimes we don't feel like we get quite enough of them. Are there ways to kind of maybe pack a little bit of gross motor into while you're actually in the classroom or while you're in the house with your kids and you're like, "Okay, we need just a quick break", as maybe opposed to we're all going to go out and do recess? Do you have recommendations for things like that or maybe how often should you be taking a gross motor break?

Margaret: I mean ideally children should get several hours of physical activity per day but obviously that can be hard. In today's hectic lifestyles, we don't have that kind of time always. So you're right, it can be great if we can embed a lot of these movement activities into their regular learning schedule. And so some really easy ways to do that during transition times instead of just walking, let's have kids jumping, hopping, maybe walking backwards, maybe walking on their tiptoes, walking sideways, skipping, galloping. Any kind of walking.

Different animals. They can download a freebie where we provide exercises all the way through the alphabet with animal actions. So you can combine learning

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the letters, learning the sounds with those animal actions. And so you're getting in those motor skills, they're getting phonetic awareness, they're getting letter recognition all in this one activity, which is great. Because it's hard, it's hard to squeeze everything in all the time. So anything you can do with the alphabet is super easy to add in actions. Of course, you can action verbs and children can benefit from moving through those activities based on the letters.

You can move like the letter, head outside, you could do side walk, talk and draw really big letters and they can walk on the letters. This also provides a student kinesthetic awareness because as we move forward and they have to write the letters. This is one of the precursor skills to actually being able to write the letter on paper is to understand the motions of the letter, the lines, straight lines, vertical lines, diagonal lines. Any of those things that you can just incorporate into your regular day into your craft project.

Instead of just drawing a straight line let's move in a straight line. How do we move diagonally? So move in a circle, square shape. Any of those ways that you can add movement to your lesson is an easy way to incorporate it.

Amy: I love some of those ideas. So much fun. So you're moving down the hallway a little bit different. And kids I think that just opens up their brain too because they're using their brain in a slightly different way. It's surprising which I think captures attention, so just a neat way. We have in our Mommy & Me Preschool program we have an activity where they get to use their bodies to try to make the shape of the different alphabet letters. And so they can try to find different ways to do that. So that one's kind of fun. I love all that, so many good ideas.

Margaret: It can be helpful for teachers to, or parents when you do add in those movements kind of create a regular routine around it because if you do have a large group it can be hard to bring everybody back around again. Okay, now it is time to learn. And sometimes it can be really beneficial if you follow the same routine every time. So if you are going to do a fun transition, okay, we're done with that. Now we're going to take a deep breath, in through the nose, out through the mouth.

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And if you do that every single time when you finish that brain break, kids will get used to that routine and know, okay, we're done with that. Now we need to be ready to take in information and learn a new skill. So that can be another helpful tip to kind of reorganize their brains and their bodies to get ready to work again.

Amy: That's such a helpful tip, thank you. So many good things. I'm excited. So you talked about children starting to develop body awareness, is this kind of part of what you were talking about with that sensory processing or is there more to that body awareness that they're developing?

Margaret: I think there's even more. Going through a physical therapy lens, body awareness is just so incredibly important in children. And again, in that educational environment. So as they're getting older they need to learn about personal space and interacting with their peers, interacting with their environment. And they do this through physical play and learning how their body works and how we move through space like I spoke about the vestibular input.

But you don't always realize that then when they arrive in school or even at home, your kids are going to bump into things or maybe they're going to fall out of bed, things like that and that's all body awareness. And if you allow children some time to explore their environment and become familiar with it, that can help as well.

So in the example of let's say in a classroom and you're starting out maybe just let the kids sometimes just explore on those first few days of where are the chairs, where are the desks, where is the carpet area. So that they're familiar with it and they know obstacles they're going to need to move around, move around their friends. And moving and stationary objects, those are different ways we respond. And so all of these physical play activities helps to develop those skills that really translate when kids get older.

So walking in a classroom line, not bumping into your peers. Playing appropriately on playground equipment. These are behaviors that sometimes kids arrive at school and can be a real struggle with socialization and for educators. And so if we can work prior to them arriving on allowing them all of

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this free play and gross motor activities it really helps to build up that body awareness.

Amy: That's so interesting. Okay, I love that. And that it could really maybe decrease accidents or bumps or things like that, but as well as helping with their social skills?

Margaret: For sure and you're right, obviously increased accidents and bumps, that's probably the most important thing especially when they're little. When babies are first learning how to walk if you can give them a safe space to explore their environment and of course soft space. They're able to learn all of that about if I move my head this way this is what's going to happen in their body. And they have a balanced reaction to react so it all adds up and moves on top of each other. They're all like building blocks, the skills that they need as they get older.

Amy: That's so cool and interesting. I know I have kids and I feel like have come with more natural body awareness and some that have kind of have taken a little bit longer. Is that normal to have some kids that seem more aware?

Margaret: Yes, for sure. And some of it's just based on your personality. There's always going to be kids who are fast movers, and like, you said, might be highly coordinated and then there are children who it might take them a little longer to learn those skills. But by allowing a lot of gross motor play you help them develop that skill. I mean they just need hours and hours of it. It's not something that's going to be developed in a short period of time. So if you encourage it throughout that lifespan it's really important.

Amy: Okay, so good to know, so good. So what are some easy ways to maybe increase that a little bit more for our young kids, maybe even at home, what are some ideas or suggestions you have?

Margaret: Yeah, sure, at home, some really easy ideas are maybe if your child's playing with an activity, say a puzzle. Instead of just doing the puzzle you could have the puzzle pieces on the floor and the empty puzzle on a tabletop. So each time they pick up a puzzle piece they have to squat down and then stand up. So

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you're really working on that core stability, muscle strengthening in the legs and they're playing. So just by moving those pieces, game pieces you're encouraging additional gross motor development.

You could do the same thing across the room, so you could have the puzzle pieces on one side of the room. The empty puzzle on another side of the room. And the children maybe have to crawl or walk backwards, hop, jump, any motor activity across the room to complete the puzzle or any game you're playing that has separate pieces. And you can create obstacle courses at home. That's super easy rainy day fun. Have the children create them. I mean that's a great motor planning task and then maybe mom goes through it.

So you can just use pillows from around your house, hand towels, washcloths, recycled water bottles. I mean anything you can think of, fill those recycled water bottles up with some more water or colored water. And the kids have to lift and move them around. It's a lot of proprioceptive input. They'll learn that this is heavy versus light. You could then take those colored water bottles, knock them down as bowling pins or throw a hoop around them so you're adding in some coordination skill as well. Those are just some very easy ways.

If you have recycled paper around the house, jump from pieces of paper to pieces of paper to make a fun imaginary game of crossing a river. Use two ropes and they have to cross the river and make it wider and wider so you're also adding in some imaginative play. Crumple the paper up. Throw it in your laundry basket. Now you've turned it into a basketball game. So you don't really need amazing equipment or anything like that to encourage those skills. If you have balls, hula-hoops, scarves, those are great.

And research tells us that when children are allowed those manipulative they increase their physical activity naturally. So if you're going to the playground maybe just bring along some balls and hula-hoops and you'll see that they'll get some more physical activity and gross motor skill play in naturally without you having to have a structured activity for them.

Amy: I love that so much. Okay, so a couple of questions that came to my mind because I think screen time is obviously a thing that we're all faced with and is a

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challenge I think for everyone. Is there some value to how readily accessible you have a remote versus toys? I think we're trying to put the toys away because we're going to be so organized and clean but is there value to having those in a space that's maybe easier to get than a remote or things like that?

Margaret: Yeah, for sure. I think again it goes back to that routine. And if you establish a routine with your children that there's a time maybe to use the screens. And there's a time that we're planning can be really beneficial. Children thrive with routines. And it just helps them emotionally regulate. Again, we're back to self-regulation, and so that they know what's coming next. And so if you're just consistent about when you're allowing screen time and when you're having free play time or structured play that can go a long way with kids and of course out of sight out of mind.

If we set a good example and we're not always on our screens that helps children see that there are other things to do. And we all know the second you go on a screen they're going to be on you like glue anyway. They're not on you when you're doing the laundry.

Amy: Isn't that the truth?

Margaret: So yeah, so I think that's helpful too, us setting good example as the adults, out of sight out of mind and there is a time and a place and that can really help if you establish those routines with the kids.

Amy: I love that. I was thinking one of the things that I have done this last summer, in particular, is I tried to obviously have toys out available. During the summer it gets tricky because they just have all this time. So they have their list of things they have to do, their routine, here's all your chores and your piano and whatever, your list of things you have to do.

But then I started a new thing where I would hide the remote and so they do get electronics time and there's a limited amount of time that they get for electronics but I would hide the remote somewhere. And it became this hide-and-go-seek game. So they would have to finish all their list and then when they were ready for screen time they first had to go search and hunt through all the cupboards in

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the house. And I would change the spot every day. It was really fun and I thought, just kind of added a little bit of extra play before heading off to a screen for a minute. So that was something we tried.

Margaret: Yeah. And it extends that time of independent play too for you. So I think that's a great idea.

Amy: Yeah, that was a really fun one, I recommend it, try it out. It was an awesome one for summer. Okay, so if you were going to just leave everyone here with just one idea, one tip or top suggestion that you have, coming from your physical therapist background what would you suggest one simple thing for people to start doing or one for them to take away from this conversation?

Margaret: I think one of the most important things is just that children need to move to learn. And that needs to start in infancy. And it can be hard in today's hectic society and children move from the car seat to the high chair to the pack and play and all of those. And we just need to make a conscious effort to provide them with safe free play time where they can develop those gross motor skills. Work on strengthening their core muscles so as they get older they're ready to use those hands for all the functional tasks we have in life from feeding, to writing, to keyboarding.

And so those early years it's so important to build up those skills. And in addition, just remember they're little kids and they need to build that skill of self-regulation in order to be able to learn. And they do that through physical play, socialization and getting feedback from the environment so that their minds and bodies are ready to learn and that's their job. They learn all day long and it's pretty cool. And as parents and educators, it's our job to support them to help them succeed and become the best person that they can be.

And by offering free play, structured play, outdoor time like we spoke about is critical in their overall healthy physical and emotional development.

Amy: This is so good. I'm so glad that we had this conversation. And you brought a special gift for our listeners that's a free download. Tell me a little bit about that.

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Margaret: Yeah, sure. I sent two along. One is the alphabet one that I referred to earlier with all the animals that go by the entire alphabet, A to Z and gives all the suggestions of how you can move to them. And it's also a coloring sheet so they can color along as well depending upon their age level. And the other one is a beanbag gross motor activity for body awareness also associated with the alphabet where kids can put the beanbag on their arm for the letter A, on your back for the letter B, catch the beanbag and it goes through the alphabet.

If you don't have a beanbag at home you can just put some rice in a sock and tie a rubber band around it, a little baby sock and you can make a couple of those. Kids love those. And you can do the whole activity that way as well. And that activity I really love because it adds in all that body awareness I was talking about, coordination skills, balance.

And it's not like you have to do it all at once but just by referring to it or maybe you're working on the letter A that week and you're always going to be reinforcing arm, put the beanbag on your arm when you're doing an activity, again to add in that movement. And learning where that can really help with the children's working memory and their cognitive skills when you add in that extensive sensory experience beyond just visual or auditory input to learn something new. So I think they're really fun activities.

They're very popular on our website. So they've been around for a while and everybody's always going back to them because it's an easy win one page printable ready to go.

Amy: That is so amazing, thank you so much for that. And we will have a link to that down in the show notes so you can grab that and start using it right away. And that's going to be so fun, I kind of want to go try it. My kids are a little bit older now, my eight-year-old and 10-year-old will still love that. So that sounds amazing.

Margaret: Yeah, for sure. And I think too, I sent along a link too for 10 fun self-control games to play because we've been talking a lot about self-regulation that requires no equipment. And some of them are just traditional games that everybody's kind of used to, red light green light or Simon says, follow the

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leader. But there are a couple on there that are really unique that really help build those kids' self-regulation skills and incorporate movement.

And so if you could include that link too I think they'll really get a lot of benefit out of some of those quick games that require no equipment. For those five minutes when you just need something to entertain the kids.

Amy: Absolutely. We were at a soccer game and the soccer game was delayed by 40 minutes. And I'm the team manager for the soccer team, my daughter's soccer team. So I have all these eight-year-olds that I'm supposed to entertain for 40 minutes and I could have used that list.

Margaret: Yeah, these are great ones, yeah, they're really fun. And that's exactly the time when you need to use them. If you just remember these couple of activities they're great to keep in your back pocket for an incident just like that you're discussing.

Amy: Yeah, I love it but it's also I hadn't thought of them as teaching self-regulation, that hadn't come to me. We use those games a lot or sometimes we play in the pool or whatever, but what a neat way to teach self-regulation, I love that.

Margaret: Yeah, because you're starting, stopping, following rules, so yeah, great activities.

Amy: So good, okay, we will definitely include a link to that and tell us your website one more time so we can send people there as well.

Margaret: Sure, yourtherapysource.com.

Amy: Okay, and we will include that in the show notes so you guys can go and find Margaret and see more of her work and more of her activities and ideas. And thank you so much for having this conversation with me today. It's been such a pleasure to talk with you.

Margaret: It's been great. Thank you so much for having me.

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Thank you so much for spending some time with me today and listening to this episode of the *Raising Healthy Kid Brains* podcast. We are a brand new podcast which means we are harder to find than the perfect LEGO in a big box full of LEGO. And we need your help so that we can reach more moms and parents, and teachers with this information about their children's brains. So how can you help? You can follow this podcast wherever you listen to podcasts and leave us a rating and a review. That would mean the absolute world to us.

And hey, we want to make it fun because at Planning Playtime we are all about fun. We made a very special gift for you and your kiddo. And your follows, ratings and reviews are going to unlock different parts of that gift over the next few weeks. It's going to be so much fun so after you follow, rate and review the podcast, head over to planningplaytime.com/podcastlaunch to find out where we are and how much of that gift you can go and get for your child right now. Thanks a million and I will see you on the next episode of the *Raising Healthy Kid Brains* podcast.