

Preschool Play for Physical Development

Dawson Nichols: Welcome to this episode in the "Front Porch" series. Thank you for joining us. The "Front Porch" series is a collection of webinars that focuses on current research and evidence-based strategies and practices for teaching preschool children. These webinars will introduce you to some of the research behind the Head Start Early Learning Outcomes Framework, the ELOF. This presentation is intended for teachers, family child care providers, administrators, and home visitors serving early Head Start, Head Start, and child care programs. I'm Dawson Nichols from the National Center for Early Child Development, Teaching, and Learning, the NCECDTL. My colleagues and I are from the University of Washington's I-LABS, the Institute for Learning and Brain Sciences, will be presenting this series. I-LABS, a partner organization in the NCECDTL consortium, is one of the leading child development research centers in the country. We'll be talking about a number of topics in this series, but we're starting with the topic that I'm particularly fond of: physical play.

As I said, I am especially fond of physical play. In an earlier part of my own life, I was a professional actor. I worked on some films, but mostly, I worked in theater, and when I did a good job, people would say that I played the part well. I played well. I had made play into my profession. How nice is that? I think this is more than simply wordplay. [Clears throat] I think there's a connection between the play that actors do and the play that children do. For example, I did it because I loved it, and that enjoyment fueled the experience. It kept me motivated and concentrated. That's true of children's play, too. I loved it because I got to rehearse things, and if I messed up, I got to try them again to improve. That's true of children's play, too. You need creative freedom when rehearsing a play, but you also need the boundaries of the script, the comfort of the boundaries, and the thrill of the freedom they work together, and that's true of children's play as well. When playing a part on the stage, you use your whole mind and body. The body part is really important because our bodies are central to who we are. Now, not all children's play involves the entire body, but physical play does, and that's my topic today. Big-body physical play, play that uses the body to engage the mind and the mind to engage the body. The two work together. And that's the kind of play that I love best, which makes me all the more pleased to report that an increasing amount of research shows that play is one of the very best engines for learning. As one promising research put it, "Play is like fertilizer for brain growth. It's crazy not to use it."

Why wouldn't we use play? And yet, research shows that children in formal learning environments are getting less play time. This is especially true of physical play, including outdoor play. Why? Because play can be perceived as nothing more than fun. Some people think that play is just messing around. It's not learning. Well, today, I'm going to do what I can to correct some of these misconceptions. Play is so much more than just having fun. It promotes social and emotional development, cognitive development, and language acquisition and development. Play encourages children to use different kinds of reasoning to plan, to assess, and it does all of this in the context of motivated and joyful engagement. It's also worth noting that play is inherently adaptable, so it's easy to include all children, no matter their

ability. It can sometimes be difficult to recognize the learning that happens during play though. There's a Polynesian saying that captures this situation quite well. It describes a person fishing for minnows, but the full phrase is, "Standing on a whale, fishing for minnows." It's meant to convey the idea that sometimes people work for something, not realizing that they've already got it — and a lot of it. This is what we're doing if we steer children away from play to other, more academic activities. We're encouraging them to fish for minnows instead of recognizing that play provides a whale of an opportunity for learning. So, let's dive in and figure out how to use it, preschool play for physical development. Here we go.

Today, we're going to look specifically at physical play in preschoolers. It's a time when children are learning about their bodies and using them to explore the world in so many different ways. Physical play provides a wonderful opportunity for learning because it follows the child's interest and abilities, allowing children to work at their own individual level, whatever that level is. Play adapts to the child, and simple adjustments allow children with disabilities or suspected delays to take part in any activity. Play also naturally incorporates language, giving children an opportunity to practice whatever language or languages they are learning in situations that are meaningful to them.

OK, here is our objective today. By the end of this session, you will be able to effectively facilitate learning through physical play. To be truly effective at this, you need to understand the different kinds of play and recognize the learning that's happening during play. You also need some promising practices for actually facilitating the play. So, we divided the presentation into three sections. First, we'll look at play as a spectrum of activities. We'll define play and talk about the continuum between free play and guided play and playful instructions. Then we'll do a deep dive into the actual learning that takes place during these activities. Physical play helps with physical development, but did you know that it also helps children learn math. It's true. Stay tuned. Finally, we'll discuss the flexibility of physical play, pun intended, and how we can guide children to maximize their learning during play. Alright. Here we go.

As one researcher put it, play seems to be one of the most advanced methods nature has invented to allow a complex brain to create itself. Play has been around a long time. Many animals play, including all mammals. It allows them to learn about themselves and the environment in a safe context. Tussling kittens are developing and honing skills that they will be able to use later in non-play environments. They're using their bodies and physical play to learn. This is an ancient system, quite literally a force of nature, which is why I like to think of play as the gravity of learning. Just as a rock will roll down a slope, it will naturally roll down, and a child will naturally play. Children enjoy playing, and so, they bring energy and focus and enthusiasm to it. That's the energy of the rock rolling down that hill, and we can direct that energy into really effective learning. That's what we're talking about today, and it starts with play.

So, what makes a thing play? Scientists now talk about play as a spectrum, a continuum of activities, organized by who initiates and who directs the activity. This is a helpful way of thinking about play because it distinguishes between different kinds of play. It also recognizes

that some activities can be play or not play depending on the circumstances. For example, a child practicing balance on a balance beam on a playground is playing. That same activity done on a log over a stream — that's not play at all. That's simply a way of getting over to the other side of the stream. So, who initiates the activity, who directs the activity, and the purpose of the activities are all important components that bring play into the situation.

Here is our play spectrum. On the left end is free play, which is initiated and directed by the child. This is what happens when children are given free time in a park, for example. In a care environment, it might simply be some time set aside when children are given a choice of activities. The child gets to decide what to do and how long to do it. It might just be running around the yard, as this little girl is doing. It's important to recognize that learning is usually happening during free play, often a lot of learning. Reading down the column, you can see that free play is initiated by the child and also directed by the child, so the child is in charge of the whole activity, which is terrific. Children learn a lot from having this kind of autonomy, but children do not give themselves learning goals when they play. So, the bottom of the column there — look at that. With free play, there is no explicit learning goal. Now, follow that road to the right, all the way across, and you'll see that every other kind of play listed here does have a learning goal. This is the thing that makes free play so different. Again, this is not a reason to avoid free play. Not at all. A great deal of very important learning happens during free play, and if the environment in which a child plays is intentionally set up by an adult, even free play can involve directed learning. There are advantages to every position along the spectrum. This is just a way of distinguishing different kinds of play from one another.

As I mentioned, free play is initiated by the child. Looking across the initiated row, you'll see that only one other type of play is child initiated, and that's the co-opted play. This is when the child initiates an activity, but then an adult swoops in to redirect that activity. The activity is like the one the child chose, but now the adult is directing it, changing the goal. For example, this little girl runs across the yard and lays on her tummy on a swing and starts twisting and spinning. Wonderful free play. But an adult might intervene to help the child learn how to swing back and forth. The adult has co-opted the play, changing the child's focus away from twisting and spinning. This kind of play is located in the middle of the spectrum because by taking away some of the child's choice, the adult can lessen the child's enthusiasm, though that obviously hasn't happened based on this picture here. Notice that everything on the spectrum to the right of co-opted play is instruction. Instruction may be playful at times, but it is both initiated and directed by an adult. So, we are going to concentrate on the portion of this spectrum between free play and co-opted play. On this side of the spectrum, children are involved in either initiating or directing the play, and research has shown that these kinds of play activities facilitate more learning across domains.

We are going to pay particular attention to these middle two, the ones that are initiated by adults who then allow children to direct the play while guiding them as they do. Researchers refer to play that falls within these categories as guided play. And why are we focusing on guided play? Well, there is growing consensus among researchers in the science of learning that activities with these areas, with these characteristics, they are optimal for learning, especially in

the preschool years. Researchers from many fields, including early education, neuroscience, psychology, and others have found that optimal learning environments, and not just play environments, but any environments, share certain characteristics. Children learn best when the learning is free from distraction, socially interactive, meaningful to the child, and active. By active here, we mean that the child is actively using the information, not just observing it. One way children actively use information is to physically use it, to use their body, to physically engage in the learning — play.

Notice that guided play satisfies all of these criteria. The adult who is there to guide the play can minimize distractions and help maintain a social and meaningful environment. And as I've said before, play is inherently adaptable. So, this can be an optimal learning environment for all children. Consider a child who is learning multiple languages. Physical play provides activities during which a guiding adult can make sure that language is no barrier to the play but rather a meaningful part of the play. But let's not forget that this is guided play. It is play, and because it's play, it is inherently joyous. It's fun. And this means that children are more likely to be motivated to engage with this kind of activity, leading to greater focus and more perseverance. Play is also iterative, meaning that the activity can be repeated and improved upon. This provides children with both a sense of confidence and mastery when they return to an activity that they know how to do, but it also provides a mechanism for them to test different ways of doing things. They can try it one way, then another way. They can test and experiment and improve, and this is a key component of learning. It's also worth emphasizing that child-directed play is naturally adaptive. Most play is flexible enough to allow children to take part as they choose. With the assistance of a guiding adult, play of all kinds can be made appropriate for children of different abilities, including those with disabilities or suspected delays and those with physical limitations. You tinker with an obstacle course -- just one or two of the obstacles, and everyone can suddenly play on this obstacle course.

And speaking of tinkering, I want to introduce you to a guest expert we have for this presentation. Michael Petrich is a professional tinkerer. He's written a whole book about it, called "The Art of Tinkering", and he's been helping children learn to effectively tinker for years. So, we've asked him to talk to us about what tinkering means in our context. What might the idea of tinkering have to teach us about physical play?

Michael Petrich: Hello, and thank you for the opportunity to share a few thoughts about preschool play. It may seem surprising that this important topic is not better understood and supported in a preschool context, and it seems that preschool development is so inextricably linked to learning through play that we would have a better understanding and support for learning in these context, but as you've seen and probably experienced, there are many misconceptions about it, but the opportunities become stronger advocates on this topic are huge, and that's why this session topic is so important for the future of learning. Our program at the Exploratorium, a museum of science, art, and human perception in San Francisco, is called the Tinkering Studio. It's a public studio for learners of all ages to engage in hands-on exploration with tools, materials, and science and art phenomena through play. We use the term "tinkering" to describe our approach, and we have come to define it as the blending of

play and inquiry. The purpose of our work is to develop playful ways for parents, teachers, and community-based programs to support a tinkering disposition in the children they interact with on a daily basis.

But today, I'd like to share three suggestions, three tips for supporting your ability as a teacher or a facilitator of playful learning moments. The first is that tinkering takes time. Learning takes time, and developing the ability to play creatively takes time too. So, my first suggestion is to offer children the real time that's needed to explore and experiment and discover the way tools work, find out how materials behave in different circumstances, and what are the ways in which science phenomenon can respond to our investigations and questions? Taking time to do these things are the ingredients for playful learning. A second bit of advice is to prepare yourself to follow the learner's path of their own investigations. We often call this "the big idea is their idea". Instead of you being the decider about what the child should be learning or how the child should interact with the materials or when the investigation is over, practice turning some of these critical dimensions of learning over to the child. These are the learning practices that will support the development of a lifelong learner. But you don't need to leave it all up to the learner. Your role in choosing the materials, the tools, the setting, and the phenomenon for exploration is critically important, and it will guide the child on a fruitful path of discovery, and we spend a lot of our time as educators in the Tinkering Studio finding ways to support this. We find ways to spark initial investigations or interest into the concept or phenomenon that we're exploring. Once they're interested, our job is to sustain their interest by offering new materials or complex ideas and questions. Again, along the path of the learner. Then finally, it's important that we find ways to deepen those learning moments so they come away with a stronger understanding and awareness of the big ideas. Now, supporting learners along their own pathway as you spark, sustain, and deepen their investigations will go a long way toward developing their conceptual understanding and support your ongoing teaching practice. Finally, one of the most important steps that you might take as a playful educator is to become a playful learner. Engaging as a learner is key to understanding what is possible when you yourself explore a rich set of phenomenon. This is important for you to understand what it feels like to explore something for the very first time. Or to reinvestigate over and over again to see what new ideas and questions emerge. This will be helpful for you when you're in the moment of supporting these kinds of playful interactions with children. For children and learners to identify things that are confusing or surprising to them ultimately leads to the ability in children to become problem posers. The power of problem posing allows learners to explore aspects of the content that is interesting and meaningful for them and gives you a glimpse into their thinking process as they explore.

Now, these ideas are easy to describe, but require a lifetime of practice. The most important message about any of them is that they will support your own playful learning practice as it grows and changes over time. Ultimately, this may result in a changed playful disposition for yourself, your students, and the other advocates of your learning communities. So, good luck, have fun, and remember to keep tinkering with your own playful teaching practice. Thank you.

Dawson: Excellent. The big idea is their idea. Yes. Especially during play. Thank you, Michael. Terrific stuff. And it leads nicely into our next section, where we want to go into more detail about the learning that happens during physical play. Let's look at some examples.

The Head Start Early Learning Outcomes Framework, the ELOF, identifies five domains of learning. The one that big physical play most directly addresses is perceptual, motor, and physical development. Gross motor development is a sub-domain within perceptual motor and physical development, and indicators of growth in this area for preschoolers include balance, coordinating large muscle movements, and development strength and stamina. These girls are taking advantage of the climbing wall in their preschool. During their free play, they climb and naturally build skills in this domain. They coordinate muscles; they balance; they build strength and stamina. Research shows that this kind of vigorous physical activity leads to significant gains in motor development. And remember, play is adaptable, so this finding is true for children with disabilities too. One study engaged children with disabilities in a physical education program. Half the children were given direct instruction while the other half were engaged in playful guided activities, and the findings were clear: Children made significantly more progress when they were engaged in playful, guided activities rather than direct instruction.

This little girl is working her way through an obstacle course. It's the kind of activity children could enjoy in a center-based, family child care, or home setting. Education staff had set up the course so that the child will work on specific physical skills. This is an example of guided learning, where the play is set up and initiated by the adult who has a specific learning objective in mind. This is still play fueled by enthusiasm and fun, but the learning is targeted. That's the power of guided play: The natural momentum of the play is guided toward specific learning goals. It's worth mentioning that physical play has other benefits, too. It's healthy. Physical activity increases the blood flow in your body, which brings more oxygen to the brain. Fueling your brain with oxygen is important for all learning. So, if physical fitness can become a habit early on, that's a lifelong benefit, and it can start with physical play. We should also remember that this benefit is available to everybody. We're talking about guided play, in which adults help children take part in the play. In one creative study, music was placed at strategic positions around a playground to help a visually impaired child know where he was. Did it increase his participation in the play? It did. Guiding doesn't have to be complicated to work.

Math has often been thought of as a strictly academic subject, so it may not be obvious how play can contribute to mathematical thinking. For example, several sub-domains of cognition have to do with understanding shapes. Identifying and measuring shapes and understanding the position of objects in space are important parts of cognitive development in the preschool years. Observational studies show that during free play, preschool children spend more than half their time engaged in math-related play. Why? Because math is a part of our world, and preschoolers at play will need to do things like understand the shapes in the hopscotch game, figure out how many blocks it will take to build the fort. Physical play gives children concrete experience with these concepts. As they march across the gym floor, these children are counting their steps, they're getting a sense for lengths and shapes and distances. They're doing

math. And think about what we can do when guiding this play. We can introduce mathematical language to make the learning even more prominent. We can talk about lengths and distances, identify numbers and shapes so that the children will be familiar with them when they come across them later in school. We can do this with multiple languages. Researchers have found that preschoolers at play-based learning programs that use techniques like this, introducing mathematical language as children play, they showed greater understanding of math concepts at the end of the year than preschoolers who were involved in other programs. Guided play fuels learning. Adding math language to physical play can help with cognitive development, but it helps with language and literacy too.

Preschoolers are learning so much about all kinds of communication. As the goals in this domain indicate, their vocabulary is growing, they're using longer and more complex sentences, and they're communicating directly more with other children. It's an exciting time for them. And physical play offers wonderful opportunities for children to build their vocabulary and practice these communication skills. And children are motivated to build and practice vocabulary during play. It's part of the play. It works in multiple languages, if children are learning more than one. And is it effective? Well, research demonstrates that it is.

An excellent example of this research comes from an activity that a lot of people don't think about as physical play, but it is. Make-believe play. When children go on an imaginary adventure, when they dress up as someone else, or even a different animal, as this child is doing, that's imaginary, but it's physical too. And the physical part is really, really important. Children get practice moving in different ways, using different gestures, working with different clothes and props, and will this kind of play promote language skills? You bet. Researchers recently conducted a large-scale study in which Head Start preschoolers were introduced to new words during the course of reading a book. They were then given an opportunity to play. Some children were given 10 minutes of free play with no adult intervention. They were allowed to do whatever they wanted. Other children were guided during their play. They too were allowed to do whatever they wanted, but an adult was there to ask questions and make observations. Taking advantage of the spontaneous play, the adult was able to reinforce vocabulary and context. For example, if a target word from the book was "scrumptious", the adult might as a child who was playing with a pot, "Are you making something scrumptious? Mmm."

The findings from this study suggest that children learn vocabulary during play, but they learn much better from guided play than from free play. And it's not just vocabulary. Evidence suggests that children use much more complex grammar during this kind of play too. Play also reinforces the children's understanding of symbols, which is an important part of later literacy. Just as letters represent sounds, children frequently use representations in play. Have you seen a broom become a horse, or maybe a banana becomes a telephone? Pretending that one object represents another gives children the opportunity to practice symbolic thinking. That's the system that language uses. The kind of physical play we've been looking at also addresses the ELOF domain approaches to learning. This is the domain that captures children's growing ability to manage their actions and behaviors. It includes things like persisting on tasks,

demonstrating initiative and independence, engaging creativity and imagination. Big physical play all along our play spectrum provides wonderful opportunities for practice in these areas. These dancers are using their whole body to creatively express themselves and engage their imaginations, and the adult is there to help them build perseverance, even when the movements get difficult. These children are enjoying free play, making up their own rules for an inventive game. They are practicing independence and initiative. Studies show that children who are supported in these kinds of play improve their ability to self-regulate better than children who are given direct instruction. And this is true for children from a variety of economic backgrounds. This is important because it means that you don't need a lot of equipment or materials to harness just the terrific learning opportunities offered by physical play.

My favorite study in this area makes this point beautifully. Five-year-old children were asked to stand still. For many 5-year-olds, this is a physical challenge. When children are standing, it's easy to fidget or bounce up and down, but just standing still, that is hard. One group of children was simply asked to do it while another group was given the same task, but in a playful scenario. They were told they were acting as lookouts. So, using nothing but their own imagination, this group was given a reason to stand still. The group without a play scenario managed to stand still for an average of four minutes. The group with the play scenario — the average was 12 minutes. Those children were focused and concentrated for three times as long just because they considered the activity play. Talk about developing persistence. Wow, play is powerful stuff.

I mentioned that earlier in my life, I was a professional actor, so I hope you'll understand why I have a special fondness for physical play that involved creativity and imagination. I really connected with this particular child at the bottom of the Approaches to Learning page here, pretending to be a firefighter. That's probably how I started out. The scenes and story he acts out will involve big physical play, but they'll also involve creative planning and problem-solving, and studies show that this kind of play boosts creative thinking and problem-solving abilities. It did for me.

Social and emotional development is the final ELOF domain. Learning to cooperate with other children and maintaining positive interactions with them are important developmental milestones, and big physical play provides motivated activities during which children can hone these skills. Any kind of physical play that involves groups of children will provide opportunities for them to develop their social skills while learning to control their emotion. In fact, research suggests that children encounter more social interactions on the playground than indoors. So, physical play is an important mechanism for this kind of development. And I've said, again and again, guided play is the best way to assist this kind of development. When a child is waiting for a turn on a slide or wanting to take part in a ball game, these are moments when a little scaffolding from an attentive adult can make all the difference. Simply standing with a child to help her be patient when standing in line or helping a child find the right words to ask if he can play too. These simple, gentle scaffolds can keep the play and the learning going. Of course, there are opportunities to bring physical play inside, too.

One terrific study looked at a program that offered children in low-income preschools an opportunity to engage in some physical play during choice time. In control classrooms, choice time was conducted as usual. In test classrooms, however, one additional activity was offered. A helper would take down the story of any child who wanted to tell one. Later, the child was allowed to act out the story for the rest of the class, either alone or with other children helping out. Using their whole bodies, they did a little play. Again, this was an option. The children didn't have to do it if they didn't want to. However, after a while, children saw how much fun it was. Of the more than 80 children that were in one of these test classrooms, only one extremely shy child never told a story. Every one of them, however, joined in the acting. They all embraced the big physical activity, acting out stories twice a week. So, it was fun for them, but did they benefit? Yes. Children who engaged in this activity showed great improvement in a number of school readiness skills, including social confidence. Participating children showed fewer disruptions, working more cooperatively with their classmates, and they exercised better self-control.

Now, it's worth pointing out that this kind of physical activity is something that can be done in almost any setting. Children can be encouraged to act out stories in groups or by themselves at a center, a family child care, a home. Encouraging children to engage their whole bodies to physically play, it can get the learning going almost anywhere.

The Head Start Early Learning Outcomes Framework, the ELOF, identifies five domains of learning, and it is convenient to talk about them separately as we've just done, but we have to recognize that really, they all work together. So, when children engage in physical play, they're learning skills across the domains. If you think about the children who acted out the stories I just described, participating children showed social and emotional improvements, but they also showed significant improvements in other areas. They showed improved language and communication skills, for instance. Learning happens across domains, and this is true wherever play falls along the spectrum. So, here are some additional examples. Children on the playground are engaged in free play. They get practice with gross and fine motor skills, but they also get practice working with other children and problem-solving. That means this play combines physical development with approaches to learning and social and emotional development.

Children doing an obstacle course are engaged in guided play. They're learning pro-social behaviors like waiting their turn and following instruction, but as they move through space, testing distances and climbing on, over, and through different shapes, they are also learning math. So, here we've got physical and social and emotional but also cognitive development all working together. Children playing soccer are playing a game. If they're keeping score, they're probably thinking about math, too, but they're also developing social and emotional skills, responding to one another's needs, helping one another build perseverance and empathy, and as they're doing these things, they're getting good language practice as well. Think of all that. The point is when children play, they are engaged in learning across domains. They move from one thing to another. They improvise, now learning about this, now learning about that. It's like

life that way. Physical and experimental and sometimes chaotic, but hopefully full of fun. And as the research shows, it's effective learning.

Looking at this variety of activities is a great way of segueing into the final section of our time together. Let's look at some practices that will help us help children make the most of their play, whatever activity they're engaged in, and wherever it lies along the spectrum. Earlier, we mentioned that effective learning environments have some common characteristics. Children learn best when they can engage in an activity without distraction and the activity is social, meaningful, and active. Notice that these characteristics do not describe a specific kind of location. Play-based learning can be effective inside or outside, in a center, family child care, a home, in a well-equipped space or an empty space. What matters is how the activity takes place. So, the first effective strategy is to make sure that the play activity has as many of these characteristics as possible. This is where guiding the play can come in. Adults can help remove distractions, for instance, or make an activity more social and meaningful. Let's look at an example. I'm going to show you a video of a child doing some big physical play. See if you can identify ways in which the adult is helping guide the play.

[Video begins]

Teacher: Can you do it again? Push it up, Aiden! Whoa! Crash! Push it up, Aiden! Push it up, Aiden! All the way to the top! All the way to the top! Almost! All the way to the top! Yeah! Ride it down! Whoo! All the way down!

[Video ends]

Dawson: This child was engaged in some free play. Am I on the right slide? There you go. This child was engaged in some free play. He had his own way of riding that car, and the teacher intervened only a little bit. She didn't co-opt the play and instruct the child about how to properly play with the car. That might have damped his enthusiasm. Instead, she recognized that his play was already really productive. He was learning about cause and effect, balance, force, motion. He's a little scientist. No need to stop the experimentation. His play was already joyful and active, so her role here was to guide the play and enhance it if she could, and she did with simple verbal cues. With some encouragement, she was able to help him stay concentrated. So, she suggested that he do it again, and there's the repeatability coming in. Her commentary was making it social. Children learn best in social situations. She was also making it a rich language experience, so the guiding really helped the learning, and the smile at the end shows that the guiding didn't get in the way of the joy at all. It was a part of the joy. So, we want the play to have these characteristics whenever possible, and gently guiding the play can do this.

What else can we do? Well, there are a few things. First, offer a variety of activities. Variety is indeed the spice of life, and research shows that it assists in learning too. So, offer a diversity of activities for physical play. We all tend to gravitate towards certain kinds of activities more than others, so check yourself. If you offer a lot of indoor activities, see if there is some outdoor space you might make use of. If the children in your care get a lot of direct instruction, well,

think of carving out some times in the day when they could engage in more free or guided play. Mix it up. Providing choices of different activities can help children feel in control of their play. Remember that one of the hallmarks of effective play is that it is intrinsically motivated. That means the child chooses to play. So, offering choice is really helpful. Consistent timing can help, too. Children thrive with consistent schedules and predictable stops and starts, so having a scheduled play time can help. A few reminders during the play can help transition work more smoothly, too. "Keep playing. You've got about five more minutes." Because reminders like this allow children to anticipate and predict. It can help them teach self-regulation, as well. Finally, I want to talk for a little bit about how to recognize when play is going well. As we saw in the video, sometimes, the best way to guide play is with a light touch. Less is often more.

But how do you tell when it's time to do a little guiding? So, this is tricky because it's so dependent on the context. Sometimes, children are having fun learning new skills, but sometimes, they are refining skills that they already possess or trying their skills out in new situations. Each of these is a terrific use of play, but each looks a little different. Also, different kinds of guidance will be appropriate for different kinds of children, depending on their temperament, their abilities, some children will need more guidance. Other children will thrive most when guidance is minimal. So, effective play will look different in different contexts, but there are some hallmarks that we have already identified, and we can sum it up relatively simply: Play is going well when children are undistracted and actively engaged in intrinsically motivated activities. This holds true for children playing alone in a park or a child dressing up as a unicorn during free time at a center or family child care. The child is intrinsically motivated, actively engaged, and relatively free from distractions. That's effective play.

Let's look at our spectrum one last time. It doesn't matter who initiated the activity or who is directing it. If these elements are present, the play is going well. Look at the far left, though. Free play. There is no explicit learning goal in free play, as we've said. The child initiated and directed the play. So, it's important to remember that free play can be going really well without having a learning goal. Now, most free play does involve learning and skill development, and it's important to give children opportunities to have independence in their play, but this is why children in the science of learning today stress guided play. All of the play to the right of free play involves explicit learning goals, which means that the energy and focus of the play is used to enhance the learning. This is how play becomes supercharged, super-motivated learning.

One final note about guided play. Guided play works best ... Come on, slide, work with me here. There it is. Guided play works best when it is flexible and responsive to individual children and their interests. When planning play, it is useful to have an explicit learning goal in mind, but it is also important to recognize that pivots happen all the time. That's OK. If a different learning opportunity presents itself, you may want to take advantage of that. For example, you may stack some floor mats or couch cushions so the child can practice jumping down, but if the child starts pushing the mats or cushions off the pile and standing them on end to make a fort, well, now you have the choice. Do you try to get the child back on task, or do you follow the child's lead and guide learning in this new activity. Moving to the new activity and following the child's interest will likely keep her motivated and focused, and there are certainly plenty of things to

be learned from building a fort. On the other hand, the gross motor skill development you had planned — well, that's important, too. Now, there's no right answer here. It depends on the circumstances. That's how play is. It's improvisational. And it presents special demands on adults. We have to be alert to what's going on and flexible to take advantage of learning opportunities as they arrive. But play presents unique opportunities, too, and by harnessing the power of play, we can really help children develop and thrive.

In 1989, the United Nations passed their Convention on the Rights of the Child. It's the world's most widely ratified human rights treaty in history, and it secures children's most basic rights. One of those rights is the right to engage in play. Play is that important. It is that basic. It is an essential human activity, and an essential tool for promoting children's developmental learning. If you're interested in learning more about physical play for preschoolers, the Office of Head Start and the Head Start National Centers have a great many resources. I put together a handout for this presentation that will point you towards some resources that are especially good for physical play. Up next in the "Front Porch" series, we will be discussing how to support children's development through nature and the natural world. That comes up in April, so don't miss that. I also want to thank our guest speaker, Michael Petrich, for joining us today and giving us his great ideas and information.