

Web-Based Radio Show

Series on Learning Differences, Learning Challenges, and Learning Strengths:

What we Can Do to Help Our Children Overcome Learning Challenges, Learn Optimally with Learning Differences and Maximize Their Strengths


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January 26, 2006

This is Dr. Greenspan. Thank you for joining us on our web-based radio show. As we discussed last time, we're continuing our series on learning challenges and learning differences, as well as learning strengths. Today we're going to focus on the intervention side of the equation – what we can do to help our children to overcome learning challenges, to learn optimally with learning differences and to maximize their learning strengths.

Just to review for those who missed the last two shows, on the first show we presented our model of the learning tree, where we had the root system having to do with all the different ways we process information, through sight and sound and movement, etc.; and the trunk, which is our emotional and social capacities, and our thinking capacities, including reflective thinking and problem solving; and our branches, which have to do with very specific learning skills, like reading, oral and written expression, math, and related academic capacities. So, when we picture our learning tree, we want to be able to strengthen all elements of that learning tree together.

What we emphasized in that first discussion was that it's rare that a child just presents with one branch of the tree as a problem. That may be the branch that's waving in the wind and drawing our attention, such as a reading problem or a math problem, but invariably it reveals problems, challenges, or differences in the tree trunk, as well as in the root system, and we have to strengthen that. We presented the case of Sally, who well illustrated that. So, not infrequently, as we discussed, children will have, along with their reading problems, some problems with attention or sequencing and problem-solving, or be tuning out a great deal or maybe not coping emotionally and




socially as well as they should, or not feeling good about themselves or really wanting to do their homework or put in the extra practice that's needed. Even children with learning differences can get discouraged because they may not be learning by the methods taught by the school. Children with learning strengths sometimes can over focus on one strength and not develop a balanced repertoire of skills. So they might be great in math and computer, but not as good socially, and not as good with literature. Others may be great literary giants, but not as good with abstract physics or abstract mathematical concepts, or they may not be as good at big picture thinking as we'd like to see.

So, we want to have all our children develop all aspects of their learning tree and, invariably, strengthening any of the branches usually involves strengthening other branches and aspects of the trunk and the root system, as well. There are those rare cases where it's just one little leaf on a branch and then our task is simple; but that's the exception to the rule, not the rule.

Last week we clarified a lot of terminology that's used, such as "executive functioning" and "nonverbal learning disabilities" and other similar terms, and showed how they're related to our learning tree and that we shouldn't get confused by these various terms that are used, both in the technical literature and the popular media, often, because they can be understood more fully in terms of what aspects of the learning tree – the trunk, the root system, or the branches – are involved. So, for example, children who have attentional problems invariably have problems with planning and sequencing actions and problem solving and therefore they have a hard time sticking to a task. Or they may be easily sensory overloaded because they're sensory over reactive, or they may be under reactive, where they don't tune in easily. So, they may have a number of problems in the trunk or the root system that contribute to the attentional problem and we have to do our best to understand how the contributing factors lead to a problem, let's say, in a branch that has to do with attention.

Today we're now going to go to how we help the children. The first steps are what we talked about in the first two sessions – really understanding the nature of the problem more fully – that's always the first step in helping the child. But, now, we want to talk more specifically about what to do once we understand the nature of the problem. The helping part basically boils down to this question: How do we simultaneously strengthen the trunk, the roots, and the branches? Because, remember,




a child like Sally or any other child, is going to have her own profile of relative strengths and weaknesses. Some branches will be strong; some will be weak. Parts of the trunk will be working well; other parts may not be working well. Some roots will be taking in lots of nutrients and also functioning well; other roots may need a little bit of work, a little bit of help. So, the real question is how we strengthen the roots, the trunk, and the branches, and how we do it together.

Now, I'm going to break this apart a little bit, but in real life we try to work equally on all three at the same time – it's not like we work on the roots, then the trunk, and then the branches. We can be working on all three at the same time, but we have to understand how they relate to each other and how to do this. For discussion purposes, not to make it too confusing, I'll be focusing on different aspects of this.

I've been debating the best way to present this because it could get confusing if we're talking about strengthening auditory processing and visual-spatial thinking and thinking skills, in general, and social and emotional skills and reading – it could get to be a real mish-mosh of information. So I've been trying to think of the best way to present this so it's a manageable amount of information and one that parents, as well as educators and other colleagues, can digest rather readily and easily. The reason why I'm emphasizing the presentation is there are lots of ways to think about this, so you may find a different framework that's more helpful than the one I'm going to be presenting now, but because this is new and involves a different way of thinking about learning, and is hardly one that is used widely yet in our schools or in our other educational institutions, we want to be very mindful of the best ways to present this information.


So, here's the way we're going to go about it: We're going to go about it by presenting this information by looking first at how we promote strengthening the root system, the tree trunk, and the branches in everyday interactions and Floortime – so just in spontaneous interactions and in Floortime-type interactions or, what we call for older kids, “hanging out” interactions. Then, we'll talk about special semi-structured problem-solving exercises that can be done at home and at school that further strengthen the roots and the trunk and the branches. Then we'll also talk about some special technologies that are helpful in this regard. So there will be three levels to our discussion. We'll see how much we get through today and whatever we don't get through today, we'll pick up next week. So, we're going to



talk about spontaneous, everyday interactions, including Floortime; semi-structured problem-solving learning exercises and interactions; and special technologies.

Let's go to the first one because that is the broad context. The reason I'm emphasizing the first one – the everyday interactions, Floortime, and hanging out time – is because we often don't think of that as a way of strengthening learning and, yet, that's what's occurring almost all throughout our child's waking time – whether it's during dinner or putting on shoes or getting ready to get into the car – we think of getting into the car as just, "Come on, we've got to get going; we've got to go to school!" and not as a learning opportunity. We don't think of dinner, necessarily, as a learning opportunity, or going shopping or discussing what TV show we're going to watch. I'm going to try to show you how all of these everyday interactions, even a debate between two siblings, or a fight, can be an opportunity to strengthen especially the roots and the tree trunk and sometimes the branches, as well. But, this is a caveat – every time we strengthen the roots and the tree trunk, we're strengthening the branches without even addressing the branches, but sometimes we can strengthen the branches explicitly, too.


So, let's talk about how to do this and first let's talk about what are our goals in these everyday interactions. Once we understand our goals we can then figure out how to best imbed them in these everyday interactions, in our Floortime and hangout time. Now, our goals here are to focus on strengthening the different levels of the tree trunk, which, as we discussed in the first session, are all our functional emotional developmental levels – that is, our ability to attend, to engage, to interact, to problem-solve and sequence, to think creatively, and to think logically, and then to think more reflectively. So, we're strengthening all levels of our tree trunk, but we're not just doing it in a simple way; we're, at the same time, doing it for each of our areas of processing information. So, we're doing it in relationship to language and auditory processing and language – how we comprehend what we hear and how we think and articulate with words; we're doing it in relationship to visual-spatial thinking or understanding what we see and how the world around us works; we're doing it in relationship to how we modulate sensation – how we don't get caught up in being overwhelmed or over reactive to touch or sound or how we don't get lost in our own thoughts by being under reactive or by being too sensory craving; and we do it in the context of what we call motor planning and sequencing – how we do in terms of planning actions and taking action in an organized and sequential way.



So, what we're doing is we're imbedding in our everyday interactions ways of strengthening everything from attending to reflective thinking, and everything from auditory processing to planning and sequencing our actions. All of the sudden, we're really developing in everyday interactions opportunities for a very strong mental workout! Imagine if every minute of every day you're exercising all these different levels, from attention to reflective thinking, and from auditory processing to planning and sequencing – it's quite a nice mental workout, right? That's exactly what we're doing, but we're going to do this in such a way that, at the same time, it's fun, especially for the child, but also for the parent and the educator. So, we've got to get this so it becomes literally second nature – so you don't have to be thinking about it, so it can be fun.

Now, at first, what I'm going to describe to you next will require a little bit of thinking and won't be pure fun because you'll be thinking too much – the adults involved in it. But it's a little bit like learning tennis or learning golf or learning a new dance step or learning to cook a new stew; initially you have to think and you have to plan and it requires effort. But once you get real good at it, you go out there and you just enjoy tennis for the competition, for the game; you enjoy dancing because you just listen to the rhythm of the music – you're not thinking of the steps – they're automatic. The same thing goes here: Once you become real good at it, these types of interactions become automatic and they become just pure fun and you can think of more and more enjoyable ways of doing them.


Now, let's go one step further and talk about how to actually do this, how to translate this principle into operation. So, remember the principle is we're facilitating multiple levels of social and emotional interaction and thinking and all the different areas of processing information, as much as we can, into these interactions. We're doing it at every age of the child. I'm only going to be able to give you a quick overview with a number of examples today, but this should be augmented in a few of the books that are available. For babies and young children up to age five, there are a lot of examples of how to do this in my book, *Building Healthy Minds*. For children who have severe challenges in these core social, emotional, and thinking capacities, there are lots of good examples in *The Child with Special Needs*, and the new book that will be out in March, entitled *Engaging Autism*, both from Perseus Books. For older children, ages five through ten to 12 or 13 and going into the teen years, there's *Playground Politics: The Emotional Lives of the School-Age Child* and *The Secure Child*, which has lots of examples of these



thinking-based exercises, as well. For those who want to read more about the theory behind this, there's *The First Idea*, a new book by Stuart Shanker and me, that's been out for about a year, that's also available through Perseus and in bookstores.

So let's look at how we do this. First, when we're interacting with our child – let's take a playful interaction on the floor – we ask ourselves a series of questions. We say, “Do I have my child's attention and is he emotionally engaged with me or am I competing with the toy truck or am I competing with his looking out the window?” if it's an eight-year-old. So, first we want to get his full engagement and his calm, focused attention and help him keep that regulated. So, our first goal is to get that cooking. So if we're not getting that, don't be worried about “Is he being a reflective thinker or is he talking a lot?” The question is, “How do we get his attention and his engagement?” If it's a little child, it may mean putting the truck he's playing with on our head, or lying on the floor and putting it on our tummy and then he's got to go get it from our tummy and our tummy becomes the new track and our nose becomes the garage and our mouth becomes the house, etc., etc. All of the sudden, we're a part of his toy play. We're part of playing with the car and all of the sudden our two-year old or our three-year old is playing with us and the car together. So, we don't compete with the object; we become one with or part of the object and that way we help him focus his attention and we help him engage, but we've got to address that first thing.

If it's an eight-year old who's looking out the window and daydreaming, we think to ourselves, “What is he really interested in? What's going to draw his attention?” Well, probably at eight, it's not going to be girls, if it's a boy, and it's not going to be boys if it's a girl. But it might be a character from TV and we might start talking about that. It might be a friend at school. It might be a favorite food. So, we've got to think, “What's going to draw little Johnny or Susie's interest, engagement, and attention?” We always go after the positive affect – we always go after where their interests are. That's a primary building block for anything we want to teach children – draw their interest in. You lose the ballgame if you start off with a subject they're just not interested in. It doesn't mean they don't have to master stuff they're not interested in, like math or science, that they may not might be interested in, but you have to find a link to something they *are* interested in to get their attention and engagement. All learning begins with affective or emotional engagement. We made that case very strongly in *The First Idea*, why our emotions and our affect are the key building blocks of our cognitive thinking skills and our academic skills. Some children




find that easy because they're naturally interested in many things; other children have interests that are antithetical to scholarly activity and there we have to find the bridge so we can teach children about math through talking about a pizza pie. We can teach children about science by talking about how to move their car faster or win a race. So, we can find ways of doing this and, certainly, innovative teachers and parents through the years have done this, but this needs to be a fundamental principle. So, we've always got to get that attention and engagement.

Now, when we're getting that attention and engagement, we're not just satisfied with that. We're always saying, "Are we getting attention and engagement using all the processing abilities of the child?" So, is he looking? Is he listening and speaking or vocalizing, if it's a preverbal child? Is he moving and using his motor skills or actions to problem solve at the same time? Can I up the stakes and get him to use smell and taste, also? Well, maybe not, but at least touching, so there's touch involved. How much balance and coordination and rhythm can I get into the interaction? Now, you're not going to be able to get all these things into every interaction, but you're trying to optimize it and you have this little road map in your mind. So, you're saying to yourself, "Is he attentive? Is he engaged? Is he using eyes and ears and movement? Is he staying calm and modulating sensation, not being overloaded or under reactive, or too sensory seeking? Are we getting calm, regulated interaction? If that's true, we've got our first step mastered.


Now, think when a child is doing that – whether it's pretend play on the floor, whether it's a chitchat during dinner – when you're getting all things involved, you're exercising all the parts of the nervous system together – the emotion, the sight, sound, movement, planning and sequencing – and that's a wonderful mental workout. That alone is strengthening the child's learning capacity and having a positive effect on his math and reading or oral and written expression without your even working on those skills.

Then we go to the next level, and we ask, "How interactive are we?" Are we opening and closing what we call "circles of communication" with gestures and/or with words, hopefully both if it's an older child who's verbal. In other words, are we able to get to a back-and-forth interaction where we're reciprocating with one another, where I'm responding to what little Johnny or Susie is doing or saying and they're, in turn, responding to me, and we're getting many of these back-and-forths in a row – in other words, many circles in a row? So, for an older, verbal child, are we having a



long conversation, rather than a two-word exchange? For a little child who's not yet verbal, are we having many gestures in a row with pointing, showing, etc.? How many circles can we get cooking? This obviously covers what we call our third and fourth stages, where we get focused two-way communication and shared social problem solving. So, how much two-way communication and shared social problem solving can we get cooking? This is a simple one and, again, for the verbal child – the eight-year old, the nine-year old, the teenager – how long a conversation can we keep cooking?


Again, here, to make it work we've got to have the child's attention; we've got to pick a topic or build on something the child's already interested in – it could be a computer game, it could be a favorite food, it could be what he wants for a holiday present, it could be what she's going to do with Daddy over the weekend or with Mommy over the weekend or with a best friend. It could be why your parents are awful or why school is terrible! So, go where the interest is and try to see how long you can keep it cooking. The longer the better because when you're having a long interaction with gestures or with words on the floor or at the dinner table or in the car – for teenagers, being in the car is a great opportunity, so offering to drive your not-yet-driving pre-16 year olds is a great opportunity for these long interactions. As you're doing this, your child is learning to sequence many ideas in a row, but to do so in a meaningful way and to be responsive to you. So just by doing it, think what's happening – if you're doing it with words or sounds, you're getting a lot of practice in auditory processing and sequencing. If you're doing it with actions, too, doing something together or something that's physical or using your motor skills, you're doing motor planning and sequencing at the same time. If you're staying calm and regulated you're at the same time dealing with what we call “sensory modulation” – you're neither being hyper responsive nor hypo responsive or overly sensory seeking – you're staying kind of calm and regulated. If you're looking while you're doing it, and tracking, you're practicing your visual-spatial processing at the same time. So, again, this is a wonderful mental workout, but now it's orchestrated not just by attention and engagement, but by two-way back-and-forth communication. In a physical sense, a lot of our ability for sequencing and two-way back-and-forth tends to be housed in the frontal lobe, in the pre-frontal cortex, which is one of the things that's been implicated in attentional problems and in many learning problems and they're strengthening it – those frontal functions, as they may be called, and we're strengthening how the left and right sides of the brain work together. So we're




doing all kinds of good things just by having a long conversation that involves emotionally meaningful dialog with gestures and with words and that, simultaneously, we're trying to involve, again, sound and words, vision and spatial relations, planning and sequencing actions, doing things physically, and modulating sensation.

So, for example, let's say you're building something together and discussing what you're building. It's easier for Daddy and Johnny or Daddy and Susie to be out in the garage building something and not talking very much. But if they're building and talking, describing what they're doing and Daddy's challenging Susie to figure out better ways to build this or vice-versa, now we're really cooking! We're getting other things going at the same time.

Now a very important part of two-way communication, which should part of every spontaneous interaction, is what we call "counter regulating" and this you can also underline as a subtitle in your notes or in your mind. By counter regulating we mean that as the adult – the educator, parent, mentor – you're balancing the child's natural tendencies. If the child is a little hyper or jumpy or excitable or irritable, you're not throwing fuel on the fire and upping the stakes, but you're being extra soothing, extra calming. So the more agitated your child's getting, the calmer you're getting. On the other hand, if your child is getting self-absorbed and tuning you out, you're getting more energized – you're putting more emotion in your voice, more expectation in your voice and in your gestures; you're challenging the child more. You can get what we call "playfully obstructive" between the child and what he's trying to do, but in a very playful, impish way, where the child has control. So, for the child who's very finicky or negative or sensitive, you ask his permission to get between him and what he's doing. You say, "Can I step in here?" and just the child shaking his head "no," shows that he's recognizing you – you don't have to actually do it and have the child throw a tantrum because you're getting between him and his toy car or him and his computer or him and his other activity, but you're gesturing you want to, and then they can direct you not to do that, and that satisfies what's you're doing. And you do it slow motion. But you're always counter regulating, which is balancing. So, you're helping the child learn to be calmer and more regulated, and this is helping your child with those three tendencies – to be hyper responsive, hypo responsive, or sensory seeking – because by counter regulating you're helping him balance those natural tendencies.




Now, because the tendency to be hyper responsive, hypo responsive, or sensory seeking underlies so many learning challenges, especially in the areas of attention and executive functioning and problem solving, which is so much a part of many learning challenges and learning differences, helping the child do this all the time is very, very important. When you're counter regulating as part of long back-and-forth interactions and problem-solving sequences or just plain old conversation, it isn't just a conversation with your tone of voice. If the child's getting excited, you're getting calmer. If the child's getting bored, you're upping the stakes. Just doing that and being mindful of doing it – something that many of you already do intuitively – when you're talking to an audience if you see they're sleepy, you tell a joke, you get them aroused. If you see them getting overloaded, you slow it down a little bit. If you see them looking confused, you give them a few more examples and slow it down. So, many of you are gifted already and do that intuitively. Certainly, when you work the crowd at a cocktail party you're doing that intuitively with different people, quickly adjusting to them. Well, these are the same skills you need to use with your children. If you don't do it intuitively, practice will get you there. There's no perfect way of doing it. You want to be mindful of the goal. But when you're doing that in everyday interactions, you're helping the child actually overcome and master these sensory modulation challenges, because every child learns that the environment can interact with him in a way that helps him balance and not be overwhelmed or underwhelmed or too sensory seeking. He or she is learning to use interaction with the environment to be self-regulating. In other words, the way in which you interact with a child becomes the way in which the child then interacts with his world. So, if the child is constantly overwhelmed you'll see he starts reproducing an overwhelmed pattern in many different settings or he tunes out entirely and goes to the opposite extreme. But a child who's very well modulated – who's learning that – will then as an older child be able to go off to a corner in a classroom where there's too much noise and when they can't understand anything because they're overloaded, they'll go to the front of the room or a corner of the room or step out and take a walk. They'll find some strategy or tactic to get back into a modulated state because they've experienced what that modulated state is, they've experienced a counter-regulating environment. Having had that experience, they can try to recreate it for themselves. In other words, there comes a point in our development where we're able to recreate favorable experiences for ourselves, but to get to that point we have to have those favorable experiences that are the building blocks.



So counter regulating is very, very important. So the secret of this next step is in every interaction – long interactions, long conversations, long play sequences, not short ones – always counter regulate or counter balance. Now, that sounds, again, easy to do, but it requires a very patient educator or parent; it requires a lot of one-on-one time or small group time because you can do this in a small group with siblings, for example, at home, where each sibling is the leader for a period of time and you tend to focus on the leader for 20 minutes, then the next child, but you try to keep all the kids involved. The same thing for a teacher working with two or three children or even four children at school. It does require a good adult-child ratio. It's hard to do with a class of 30 children and one teacher. So, it requires helpers in the classroom, breaking into small groups, and sometimes in well-organized classes the kids can do this for themselves and to themselves when you set up an exercise where they work in groups of two or four. The idea is to balance large group lectures with lots of small-group work, whether it's the students, themselves, or aides or helpers or parent volunteers. We haven't made enough use of parent volunteers or aides or helpers in our school system for children who, particularly, need small group work or a lot of one-on-one work. So, that's very, very important.


Now, the next level in our spontaneous interaction: The next level involves creative and logical thinking. So once we have the child fully engaged and attentive and regulated, and we have the long back-and-forth sequences of interactions, then we go to creative and logical thinking. Again, we can be doing these all simultaneously with the older child who's capable of all this, so we're not just focusing on one and then the other, but I'm breaking it down. But, here, we want to be promoting in everyday conversation and interaction the child's creativity. That requires, again, having attention, getting him emotionally engaged, talking or doing something she's really invested in, and then challenging her to be creative in that endeavor. So, for example, if it's something is during dinner with a verbal child, talking about not just a favorite food, but what kind of a food would he create that would be a combination of all his favorite foods? Maybe he would make a "burger-frankfurter-chili dog" or something; or a "chicken finger French fry," or whatever. Who knows what? Here, you can get creative thinking into almost anything. So, be creative.

Obviously for the young child, ages two through seven, pretend play on the floor is a wonderful way of getting creativity cooking. For the older child, creative writing, creative story-telling, creating new computer games, creating new versions of existing



sports, like combining basketball and tennis in some way or developing a new type of dodge ball. So, anything from new computer games to new sports or choreographing new dance steps, inventing new dances – always be mindful of challenging or stirring or facilitating the creative part of your child’s thinking. It’s easy to get stuck on facts and rote learning and ignore creativity and it’s especially easy to do that in school where there’s a demanding curriculum and there are tests coming and a certain amount of facts that need to be learned. But, remember, what makes America great and why America has been an innovator is not necessarily because American kids do better on math tests or reading tests, but because America has been a hotbed of innovative thinking; we just don’t measure creativity on a lot of the tests we do. But that’s the building block of the American economy and the American ethic, but we’re in danger of losing that now. Even if you’re not concerned about the world’s economy and America’s role in it, and you’re concerned about your own child, I can promise you that his or her ability for being an abstract thinker and a problem-solver and being successful as an adult will depend more on his creative thinking than any other skill you’re going to challenge him to master and it’s going to be more fun, too, because nothing is more fun than creativity. For the older child, whether it’s creative story writing – the creative telling of stories – or creating your own music or creating your own novel dance step or sports move, focus on creativity.


That doesn’t mean you ignore facts or ignore the foundation of knowledge. What it means is you’re doing both. When you’re in school and learning history and learning, let’s say, about the Revolutionary War, sure you’re learning about George Washington and you’re learning about the different battles and you’re learning about the reasons for the war, but once you have those facts at your disposal, you’re using them both in a creative way, as well as a logical way. So, once you know that the key battle occurred at a certain place – let’s say the Battle of Trenton – you might say, “Okay, well, here’s the set-up. Who wants to tell me what actually happened?” Well, there was Washington on one side of the Delaware, there was someone else – the British general there – and this is what actually happened. And then say, “Okay, well if you were the British general and you, Susie, were Washington, would you do anything different? What else could you have done?” and then you have them innovate and create. So, you master the fundamentals and then you get creative and innovative and then you have the best of both worlds now. Then you’re going to remember the fundamentals, too, much better because now you’ve created off the fundamentals. That’s going to be the fun part for the kids. It also helps them empathize if you’re talking



about the Indians and whether we did right or wrong in the way we took over the continent. You can have an exercise where they learn what actually happened historically, but then, what if they were Indians, how would they feel? What would they do differently than the American Indians did in some of the early negotiations? Would they have sold Manhattan for twenty-four dollars? Were the Europeans moral in doing what they did? You can't have these debates unless you know the fundamentals of history, but it reinforces the fundamentals.

The good schools and talented teachers already do this, and parents who are talented already do this, but even among talented parents and teachers, it's not emphasized sufficiently. So, be creative, stir creative juices in your child, let them taste the pleasures of creativity, whether it's simply moving the truck in an innovative way because your hand is a barrier and now they have to figure out a way around your hand, which is the beginning of creativity for your 18-month old; or if you're a teenager, whether it's creating the grand novel or a short story out of your imagination, creativity is wonderful. It can also occur in everyday situations where you always get your child's opinion. The key here is being respectful and really, truly interested in your child's thoughts, which requires that emotional piece – getting their attention, their engagement, really focusing on their natural interests, and truly valuing their ideas – and every child has good ideas. What's interesting is the more learning problems the child is having, the more important the creative piece is, and the more important it is as the route to learning because that will help the child master difficult concepts. So, always focus on creativity.


Now, the other half of this equation is also trying to be logical, which means in your conversations with the child, help the child or challenge the child always to make sense. These are our fifth and sixth levels of our tree trunk. So some children, for example, will be talking about school and then drift off into make-believe, where all of the sudden you're talking about action figures or dolls or computer games, and you see they're avoiding the school discussion because it's hard and it makes them nervous and talking about make-believe is much more fun. We call that "escape into fantasy." So, here, if the child says, "I don't want to talk about school any more. Now I want to talk about my computer games," well, the child's being logical and creating a nice bridge or transition and we may say, "Oh, fine, okay. Let's talk about computer games or TV shows," or "Let's talk about that in a minute, but just finish telling me a little more about what your teacher said." So, you've got a choice then. But if the child just sort of



changes the topic in midstream or is seemingly out of left field, then we need to act confused. “Hey, Johnny” or “Hey, Susie, I’m lost here. You were telling me about your teacher at school, how it made you feel bad or how he presented the math in a way that you couldn’t understand it and now you’re telling me about Buzz Lightyear – I’m lost!” and let the child bring you back. If the child just goes off into Buzz Lightyear again you say, “Hold it, hold it, hold it! I’m even more lost. You didn’t answer my question. How did you get from your teacher to Buzz Lightyear?” “Oh, I don’t want to talk about my teacher anymore; I want to talk about Buzz.” “Oh, okay, you hadn’t explained that to me. I’ll be happy to talk about Buzz, but why do you prefer talking about Buzz to talking about your teacher?” “Oh, she makes me so frustrated!” So, now you’ve challenged your child to make sense and that’s doing logical thinking, challenging the child to connect his ideas together.

Now, again, here, when we’re working on creative and logical thinking and making sense, we’re simultaneously working on all the different processing areas. So, we’re doing this – obviously, with the verbal child, with words and auditory processing. We’re also trying to do it with movement, so in play we’re trying to see if the actual motor actions are creative and logical. Are we building a house or putting in an innovative roof on the house or a new room in the house? Are we doing anything interesting visually? Can we do a drawing of what we’re talking about? Can we choreograph a dance? Are we modulating sensations? Am I counter regulating with my child? Are we building structures for my sensory craving child and, if so, in a constructive way and not just a destructive way? So, we’re always mindful and we’re always working on expanding the different processing areas.


Now when we get to creative ideas we want to make sure we’re bringing another piece into the equation and that other piece that we want to make sure we bring into the equation is our social and emotional range. Now that actually becomes important when we’re talking about attention and engagement and two-way communication and shared social problem solving, as well, but it really gets emphasized here in the creative and logical thinking component of our tree trunk and the root systems that support it. The reason why I’m emphasizing the emotional and social range for all the levels is then they’re bringing in all the senses – vision, hearing, movement, touch, and so forth – we also want to always be expanding the emotional range of the child. While this is important at all the levels, and we want to go back and add it on to our outline of all the levels, it becomes easier and clearer how to do this when we get



into the creative and logical thinking. For example, is the child able to explain and make sense of all feelings? Can he talk about why he's sad, as well as why he's happy or why he's angry or why he's scared? Or can she just talk being angry and never happy, or talk about being happy, but never angry? Or can he just give you global answers like, "I feel good" or "I feel bad," but not tell us about specific emotions? Can they build into their pretend play emotions like excitement, enthusiasm, happiness, joy, scared feelings, angry feelings – "I'm going to get you!" – and then play out in a robust way the different things – "I'm so excited!" – as they talk through their parents, or "I'm so mad I'm going to slice you up!" In other words, can all the feelings come out?


The reason why it's important for all the feelings to come out is because when a child is unable to use creative and logical thought or two-way communication for the full range of feelings, those feelings don't go away – they exist, but they exist in a more global form, a more catastrophic form. So, let's take anger. Anger is a problematic one because some parents don't want play involving anger, don't want to discuss anger. But think of it this way: Your choices are few and far between as an educator or parent. Anger exists initially in the baby and the young child and in many adults in a kind of catastrophic way – an all or nothing reaction. You kind of get furious, you get enraged, and it's just part of the human condition; it's just there, along with hunger and other basic needs and so we want to socialize that anger. We want to make it constructive. We want to make it something you can talk about and not act out. To do that, we've got to first get it as part of a two-way communication system where it's modulated, where a child – instead of banging or biting or hitting – can gesture with a grimace, "Arggh!" or an angry movement of his arm and we can gesture back, like, "What's the matter?!" and we can negotiate. And then, that enables the child to eventually use the word, "Mommy, me angry" and, when the child gets to be logical, "Well, can you show me? Can you show me in the play?" or "Mr. Alligator, why are you angry?" and Mr. Alligator can talk back. Then you ask the child realistically – a four-year old on up – "Why are you feeling so angry today?" "Well, because you didn't let me play with what I wanted to play with." And you say, "You thought you should be able to?" "Yes, I did!" "And where did you get the idea that you were supposed to be able to watch 10 hours of TV today or eat 23 hotdogs?" and have a discussion about it.

The ability to interact and gesture and discuss helps the child modulate the intensity of the feeling and basically civilize it or socialize it, and it becomes debate and negotiation instead of acting it out. If we keep it under the carpet and it never gets



pretended, never gets discussed, never gets verbalized because it's "a bad feeling," the child has only two choices: either it stays at the catastrophic, explosive level where he's feeling explosive rage or the child acts out periodically, or it gets contained and inhibited, where the child has to become very passive and very cautious about life in general to keep that feeling contained, but it kind of inhibits the whole personality, then, and may lead to other symptoms later on – physical symptoms like tummy aches and pains, skin rashes, headaches, and the like. So, it can also lead to more ritualistic behavior – compulsions and obsessions and other kinds of repetitive patterns. It can lead to all kinds of negatives if it's overly inhibited and lead to all kinds of problems if it stays at the impulsive level, if the child acts out. So, in a sense, the only choice with basic feelings is to help them become part of a progression of development where they become expressed at higher and higher levels of development, and now we're talking about levels of creative interactions and logical "making sense" interactions.

So we want to always go for the full range – from happiness and joy and dependency and fear and anger, so emotions don't stay catastrophic and in an all-or-nothing mode, but basically become part of these higher levels of development. What we're emphasizing here is that in our creative and logical thinking we're bringing in all our processing capacities and we're bringing in the full range of emotions. For children who are avoiding a certain emotion, we might stir the pot. For example, in pretend play we might create conflict – our car deliberately blocks their car or is deliberately going to be faster than their car and beats their car out to stir assertiveness and the competitive juices. Or, "My ballerina is a better dancer than your ballerina – ha ha ha ha ha!" Other times, the pretend teacher can be admiring of what their ballerina is doing. So, we want all the emotions, from pride to competition to healthy assertiveness built into the pretend play. Where something is missing, gently stir that up just to see. If the child seems to get nervous by it, do it even more gently, and then in a logical discussion we can say, "Why don't you like that? How come you're never able to lose or be sad or disappointed?" because some kids never want to lose – even in make-believe. You'll notice that some kids in their creative play take it very literally, so it's not really pretending, it's not really creative. In a sense, it's too stuck in reality. Yes, it's a "pretend drama" but they take it literally and their dolly better win the game or else! So, there, too, we want to help by bringing them more into the fantasy realm and find out how come it's so scary for dolly to lose sometimes, etc.



So, now what we have – and we'll have to stop in a minute for today – and we're going to continue with this next time when we go into the higher levels of our tree trunk, where we get into more multi-causal thinking and comparative thinking and gray area thinking and truly reflective thinking and show how that gets brought into everyday interactions as part of strengthening our tree trunk and strengthening, also, indirectly, our root system, as well. Then if we have time next week we'll be getting into specific exercises, but that may wait for the week after, at the rate we seem to be going.

So, what we've covered today is the first half of what we want to get into our spontaneous interactions. And, again, the point to emphasize is helping the child attend and be calm and regulated and engaged and interactive, with long conversations or long sequences of back-and-forth two-way communication, and to be creative and logical should be built into every interaction. When we do that, we're strengthening our tree trunk and when we bring in all the processing areas – sound and vision and movement and touch – we're bringing in our root system. When we teach the child to modulate through counter regulating, we're bringing in that root system and all of this is strengthening the branches without even paying attention to them. The child is already learning to be a better mathematician, reader, writer and, most importantly, a thinker and problem-solver. So, we will resume with these spontaneous interactions next time. Thank you for joining us.

There's a possibility, and I'll know this in a few days, that our next show may have to be in two weeks rather than one week, but I'll let you know that in a few days and it'll be posted on the website because I may have to be away next week but, if so, we'll post it on the website and then we'll resume in two weeks. So, thank you very much. Bye bye.