

Web-Based Radio Show

DIR[®]/Floortime[™] Basics Part V

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Good morning and welcome to our Web-based Radio Show. Today is November 5, 2008 and thank you for joining us. Today we will continue our series in Floortime Basics. As you know, we have been talking about following a child's lead, to harness the child's emotions which helps connect all parts of the mind and actually helps lay pathways in the brain as well. But then to challenge the child, once we follow a child's lead to higher and higher levels of intellectual, social, and emotional development. And then we talked about how to challenge each of the above levels until we get to the higher levels.

The last few times, we have talked about connecting ideas together, how to help the child become a logical thinker, a causal thinker and also a multi-causal thinker where the child can give many reasons for feelings like sadness, or happiness, or joy, or glee, or anger – but where the child can also apply that same principle in understanding the world. There are many reasons why, for example, he or she might like one author over another author, or one book over another book, or why something that may happen in the physical world like why the sun makes the earth or the planet bright and nice and warm, and why when the moon is out it's dark. So for both scientific thinking and mathematical reasoning and understanding how to read and what you read, as well as for understanding feelings, connecting ideas together is essential and to be able to connect many ideas together with many other ideas and having multi-casual thinking, that's essential also.

Today we are going to talk about the higher levels of thinking and also about how challenging a child in this way – socially, emotionally, and intellectually – is both the way we help the child become more social, more flexible, and a better thinker, but also to master his or her academics. And then we're going to go onto the higher levels of thinking a little bit, what we call comparative and gray area thinking and also if we have time, reflective thinking.

We are going to show that academic abilities and social and emotional capacities and general thinking abilities are really one and the same. They are part of the same coin and not even two sides of the same coin – they are the same side of the coin. Many, many colleagues, as well as parents, separate out the two. They say, well if you're using a DIR®/Floortime[™] approach where you're following a child's lead and challenging a child, that's great but what about teaching my child how to read and write and do arithmetic and the academics, why can't my child do what other children are doing and doesn't that require a more structured approach?

We're going to show that academic abilities have steps that lead to them. You don't just jump into math or jump into reading or jump into writing. You have to master a number of steps to get there. You need the exact same steps as you mastered in your social and emotional development. We're talking about how academic abilities and social, emotional, and intellectual thinking capacities are part of the same coin, not even two sides of the coin and the reason why we are talking about it at this juncture is it's when the child begins to connect ideas together that the child begins to be able to participate in what we normally or ordinarily call academic learning as opposed to a more general learning. But really, these are not separate – they are part of a developmental continuum or think of it as walking up a series of steps. Step 1, step 2, step 3 and finally you get to step 4 – you are also learning about math or reading or writing.

Now let's go through these steps and show why they are all part of the same group of steps – not separate steps. It's not that you teach a child academics or you teach a child emotional and social skills, or that Floortime is just play for social relationships and academics is sitting at a table and doing some "serious work." When a child takes the first step in our DIR®/Floortime™ approach, the child is learning to focus and attend to the world outside themselves. Well this is a necessary first step in not only emotional and social and intellectual development, but generally for academic abilities you have to be able to pay attention, pay attention to the teacher, pay attention to the book, to the letters, and to the numbers. You have to be aware of the world outside yourself – you can't be living in your own world of fantasy or thought or even if you're not thinking, your own world of bodily sensations.

Step 2 – when you engage in the human world, it's a further step of taking an interest in the world outside yourself. Now, in of the human beings, that sounds like it is just social and emotional, but all we're doing is learning to be social beings, or learning to be intimate. But actually, it's also a further step in using your eyes, your ears, your feelings, and your movements all together. You are now focusing on a person – your mom, or your dad, or your other caregiver and you're learning to coordinate all your different senses in a harmonious and integrated manner. In other words, they are working like a good team – a basket ball team or a good ballet or an orchestra works together – because they are all being used when you give that smile or give that big joyful, gleeful sound. That's using what you see and what you hear because that stirs up some good

feelings of excitement and pleasure, and those feelings of excitement and pleasure then enable you to coordinate what you do and further use your senses again.

Now, why is that part of academic abilities as well? Can't you be an impersonal person who is incapable of relating to people and be a good mathematician? I'm sure there are some who don't master this stuff fully but you have to master it at least partially and the reason is because it's in that relationship that you experience the pleasure and excitement to want to make sounds – the gurgling, gleeful sounds, the sounds of disappointment, or annoyance at the caregiver - without the relationship you're not making sounds and that's the first step in language. Language is certainly a critical part of learning to read. If we don't understand how to have ideas through words, it's hard to understand the meaning of the words we read. If we don't hear mother's voice with a special interest, or daddy's voice or another caregiver's voice with a special interest, we don't learn to discriminate or see the differences or hear the differences of different sounds. And if we can't hear the differences of the different sounds, it's very hard to learn spelling because spelling means coordinating what we see, a written shape which we call a letter like a "B" with the sound "baa" and we learn about "baa" because mommy says "but" or "because" or "You're my best little baby" or sings a song, "Beeba, Buba, Bubob" and this helps us learn to see the differences or understand the differences or the best way to detect the differences among sounds.

Also, we're learning about quantity in this preliminary way – a little more of mommy or a little less of mommy. After all, this is emotional – more is a little more than we want, or a lot is a little more than we want, or a little less than we want. So it's connected to our emotions and our emotions don't get developed unless we're part of a relationship.

Also, this relationship becomes important for the next step because it's the beginning of interacting with the world so we make a sound and mommy makes the sound back; we smile and mommy smiles back. We see we can make things happen, that we have intent or will and that's the beginning of causal thinking before we have ideas. I made this happen. It is also the beginning of feeling even just a little part, as a separate little person – I made this happen so I made a smile and that got mommy to smile back. Now, we don't think about it that way at four or five months old but that's the experience that's being laid down for us that we're mastering and that's the beginning of causal thinking.

Can you have scientific reasoning without a sense of reality, without a sense of purpose? Can you have a sense of reality – what's real from what's make believe – without having a sense of causality, without having a sense of logic to the world? Piaget

did his famous experiments where he had children pull a string; babies pull a string to ring a bell. When he cut the string, it didn't ring the bell and they stopped pulling the string. From that he reasoned that causal thinking begins at an early age, around eight/nine months of age. What we see is that the same type of causal thinking begins much earlier when a smile begets a smile, and a sound begets a sound and where a movement – reaching your arm out for the rattle – gets you the rattle that mommy is holding or mommy is putting on her head or mommy is putting in her mouth and you want it for yourself. And these back-and-forth interactions are the beginning of this sense of causality that I can make things happen. Without this, we won't understand how the world works. We won't be able to be scientists. We won't be able to understand that one apple plus one apple equals two apples because that's a form of connecting ideas together that at a later age which begins with causal thinking. So we have to causal thinking or else we're in our own world.

Understanding the meaning of words depends on causal thinking. The word "momma" represents your mother, and the word "dada" means daddy. That's a sense of causal thinking in its own right because you're connecting the sound "momma" or the sound "dada" with the image.

Now as we progress up the developmental ladder and we learn what we call shared social problem solving where the child is taking you by the hand and walking to the refrigerator and pointing to the food they want or taking daddy to be picked up to grab that toy they want to play with. We get many back-and-forth interactions with a lot of intent on the part of the toddler and that's when, as we talked before, children or toddlers are learning pattern recognition – seeing that six, seven steps in a row of interaction will lead me to getting that toy or lead me to getting that juice. That's the beginning of scientific thinking – that Step A leads to Step B leads to Step C leads to Step E and so forth, but it's also the beginning of understanding the patterns of different sounds, making words. So we get the beginning of language which is the forerunner of reading, necessary for reading.

Even for children who have a hard time speaking, they can still understand sounds, understand words. And even if they don't understand words in the way that other children understand words, they understand the sequence of letters making up a pattern that constitute a word, that can be associated with the meaning. So, apple is associated with a picture and taste and smell of an apple even if you're just learning to read it and can't say it.

Furthermore, as we get into shared social problem solving, many interactions in a row where that pattern recognition is also further helping us understand the concept of

quantity because six or seven of something is a different pattern than one of something, just visually. We can see it but we have to be able to see more than just a tree in the forest. We have to be able to begin seeing the whole forest to be able to see the difference between six or two before we can even count. And that's necessary for understanding mathematics. We can learn some math facts but they will just be isolated facts with no meaning unless we understand the pattern that they are part of and we have to be able to experience that pattern. So our emotional interactions fuel that academic ability.

The ability to write a whole word again is sequencing a number of letters into a word. That sequence is part of a pattern which comes from this ability to master patterns in that toddler phase of life. So reading, math, and writing are all a part of this critical stage in development where we have many circles of communication occurring in a row and it's the beginning of pattern recognition, and as I mentioned, it's also scientific thinking. This is where a child can take a chair to try to get up to get that toy on his own, or use daddy's shoulders as the chair through a series of gestures. So here's where a very important academic ability is being developed just as the same time, as we pointed out earlier, an important social and emotional skill is being mastered.

Now when we get to the next level, using ideas meaningfully, it is very clear that we have to understand ideas, which is really words like apple, pear – it could be one type of word – mom, dad, bicycle, refrigerator; it could be other types of words or understanding a sentence – "The boy was happy when he got a bicycle for his birthday." That's putting a lot of meaningful words together. Well, that comes with using words meaningfully. If we just memorize "apple is for eating" and someone says apple, all we'll be able to do is say, "apple is for eating." We won't be able to understand what an apple really is. An apple is many things – it's something you eat; it's round; it's red, it's something you throw at your brother when you're angry, it's something you give to the teacher when you want to please her; an apple is many things. Mommy is even many more things – a whole range of feelings, as is daddy, as is "I want to go outside and play" – that's a very meaningful sentence. It has desire, interest, causality – all imbedded in one statement.

So using ideas meaningfully and creatively is a critical step in 1) understanding what we read; 2) understanding what we're writing – writing a meaningful series of words together that constitute a sentence; and also 3) understanding math. I wanted four apples, not two apples. Or if I have two and you take one away, I'll only have one and I won't be a happy camper. But even with the "I won't be a happy camper" part, you have to have the meaningful use of ideas to understand how math works because it's using ideas in a quantitative way and in a way where we are determining quantity of things. So

to really understand what a lot is or a little is, what \$5 versus \$1 is, those are all playing with ideas each of which has a meaning. A dollar will buy you this kind of food; five dollars will buy you that kind of food. A hundred dollars will buy you a meal at a fancy restaurant.

So using ideas meaningfully is critical for reading comprehension, for math, and for writing. Our basics of academics are embedded in mastering Stage 5. When we get to Stage 6, connecting ideas together and then connecting many ideas with many other ideas, not only when we get to mastering causal thinking and multi-causal thinking, then we're ready to move onto what we ordinarily call academics but which shouldn't be called academics because it begins, as I've been explaining, at the beginning. But then you notice children will begin actually reading words in a sentence, or will begin adding or subtracting 3 + 2 = 5. It will begin, if they have the motor control, writing words or maybe even writing, "I want juice" as well as saying, "I want juice." So then we begin noticing the academic abilities as the children begin connecting one idea to another idea and many ideas together. And it's the noticing it that makes us think that formal academics begin at this stage and why many colleagues and many of us confuse academics with the basics of social, emotional, and intellectual development when, as I've been explaining, they are all a part of the same sequence of steps. So we shouldn't separate them from one another. They are all one and part of the same and we'll explain as we go up to higher levels of thinking how that gets us into higher levels of academics, as well as emotional, social, and general thinking skills.

When we get into the more formal academics, the kinds of things we normally associate with academics, most of us are already at the level of connecting ideas together, being able to do causal thinking and multi-causal thinking. That enables us, for example, not only to master more complex social and emotional skills as we have already described, but begin to understand a higher level of academic challenges. So now, as we understand causal thinking and how ideas are connected, we can understand a more complex sentence that someone may read to us or we may be able to read ourselves. "The boy went to the store and got some candy and therefore was very happy" – that's involving causal thinking in a formal sense.

Since we connect ideas together, if we have the decoding skills – which are based on pattern recognition – mastered, remember, at the stage of shared social problem solving, we might be able to read a whole sentence ourselves. Remember, decoding also depends on hearing different sounds when we're babies so we can understand the difference of different sounds; so we can associate what we see with what we have heard. And even if we can't hear, we learn through Braille and we can connect what we see with what we feel with our hands. So there are many ways to master what that visual image of the shape that we call a letter means.

The important point is that we are now causal thinkers so we understand what we read at a higher level, and we can understand the meaning of the passage as well as decode more effectively because we can sequence many sounds in a row and not only can we sequence many sounds in a row, we can see how they make up words and words can make up sentences and then even eventually whole paragraphs. So we're now really beginning to cook, so to speak, academically.

Also in mathematical reasoning, we can understand that $25 \notin$ will get us more candies than $5 \notin$ will because that's a causal relationship as well. We can also understand that if we take A and add to it B, we get C – that's a causal relationship – A + B = C. It may be 1 + 1 = 2, or 2 + 2 = 4, or 2 + 1 = 3 but that involves causal thinking because we're seeing the relationship of an "A" to a "B" to get a "C". All of that is very critical.

When we're writing, we want to write in a way that makes sense – write a sentence that makes sense. That too requires connecting ideas together or connecting many ideas together in what we call multi-causal thinking.

So now we're beginning to cook at more formal academics and our social and emotional skills and general thinking skills are advancing. To separate academics from thinking, or social or emotional development is actually silly. Now some children do master these skills that we're talking about, these steps, in a very narrow, limited way. They may do it for math or for reading but not for social relationships. That's only because we haven't worked with them sufficiently on expanding the range through which they apply these fundamental principles. In other words, the fundamental capacity the child is mastering – the casual thinking for example – can be applied to many realms depending on the child's experiences. Now some children, some realms or some parts of the human experience are tougher than others. So for some peer relationships may be harder because they become more anxious because they're over sensitive to sounds or touch, and their peers are rough, or their peers are unpredictable so they shy away from that and they have casual relationship when it comes to words or math but not as easily in social relationships. But they may require just more practice rather than requiring a whole new way of thinking about development. So they require us to work with them on the peer relationships so they can apply this fundamental principle to their peer relationships.

Here we're seeing that academics and social/emotional development and intellectual development are part of the same developmental sequence, but for children who only apply it to some experiences because of lack of practice or because some experiences are harder for them because their sensory system is such that they are very sensitive to certain kinds of noise or sound or touch or they're very under-reactive so they don't respond to other human beings as well as they respond to things they see on a page or where they can look at it many times, we have to expand their range of experience. And that's essentially what we do when we work with children.

So we've seen how our basic emotional and social skills, and our general thinking skills – our intellectual skills – are tied to our academic abilities in a step-wise progression and how these are all part of the same sequence. In other words, we're learning to read, write and do arithmetic from Day 1 in life, just as we're learning to relate to others, to interact, to become social beings, and just as we're learning to experience our own emotions and understand the emotions of others, and just as we're learning to be thinkers, to understand patterns, to understand how our behavior affects others, how our gestures affect others; just as we're understanding how to create ideas and learning the meaning of ideas and learning how to connect ideas. These are all part of the same developmental sequence.

And it all begins with our old friend, emotion or affect which helps us connect the senses, helps us begin relating to the world outside ourselves because we experience pleasurable affects in that world, it helps us relate to other human beings which then creates the basis for language and interaction and understanding patterns and ultimately words and meanings and causal relationships. The sequence of emotions that we experience and the lead role of affect in helping us coordinate the senses and then relate to others, and then understanding how interaction works and stirring the different levels of thinking, and that leads to and helps us master the steps of formal academics and formal school-based learning because often the school-based learning doesn't involve all these other steps or all these other aspects of human development.

So if there is an over arching theme, it's one of unity. It's one of don't separate things that are not separable – keep them as part of the same.

Now once we master connecting ideas together, causal thinking and multi-causal thinking, then we can apply that to the emotional, social and academic realms or the intellectual or thinking realms we can advance and challenge the child one step further. Typically, between ages of $4\frac{1}{2}$ to 5 and 7 or 8, children are learning what we call gray area thinking. They are learning to see gradual gradations – from a little angry to very angry to enormously angry. They can rate their anger on a 1-10 scale. The same thing with sadness – well I'm a little sad, I'm very sad, or I'm the saddest I've ever been. They can use that to help them compare things. I like this book better than that book because this book is about children or this book is about animals and I love animals. And instead

of in earlier development where we'll see somebody say when you ask them, "Gee, who do you like better – Johnnie or Robert?" and they might say, "I like Johnnie better" "Why, why do you like Johnnie better than Robert?" and they might say, "Because Johnnie is fun to play with" but they don't really compare them to Robert. But now they can actually compare Johnnie and Robert. "Oh, I like Johnnie better because he's more fun to play with." And then we can say, "How much more?" "Oh, not that much more, sort of a medium more" or "On a 1-10 scale, he's a 7 and Robert's a 3" so they have that sense of quantity.

So they have that sense of quantity that is part of their thinking now because they can qualify things. This helps them go from polarized, all-or-nothing thinking which is characteristic of just the fundamental level of causal thinking where things are, "I love him and I hate him" or "Sarah was mean to me so therefore she hates me" to "Sarah was a little bit mean to me today but not that mean and other people were nice to me so it wasn't a good day for me, but it wasn't my worst day." So there is a difference in their quality of thinking. In comparing two authors or their reasons for the Civil War – children can use this more subtle nuance, what we call gray area thinking with degrees. "Well, there are three or four reasons for the Civil War. The most important reason was "A," the second most important was "B," the third was "C." Now they can memorize that or they can have a feel or actually the degree or the quantity of it. You can imagine the flexibility in emotional and social skills from the examples I just gave when you can do gray area thinking.

You can also imagine the enormity of your own appreciation of your own emotions when you're not locked into "Oh this is the worst day of my life or the best day of my life" all the time, but "This is an okay day" or "This is a glorious day" or "This is one of my best days ever" kind of thinking.

How does this relate to our academic skills? Well, now we can look at the degrees and understand multiplication for example. We can understand division. We can understand even basic adding and subtracting a little bit better and understand mathematical concepts. We can understand more complex passages that we read, and we can write our little paragraphs that are more complicated where we describe our weekend, or we describe why we like a certain book, or why we like Book A better than Book B. So it enhances our academic skills considerably.

Initially, some in the first grade or who are learning to read and decode and just write a little bit and do basic math, we don't challenge a child's gray area of thinking very much and a child can get by on memory alone. But once you get up to third or fourth

grade where thinking is required, gray area thinking comes in very handy and without it, actually, it will be hard to make the kind of progress we want children to make.

Now, we're going to talk more about this next time. We will talk more about gray area thinking and hopefully get up to reflective thinking and how this ties in with our emotional, social, and intellectual and thinking development, as well as our academic skills.