

PART I

Pouring the Foundation—Theory

*"Everyone has a story. If you knew my story . . .
you might change your mind about me."*



What story are we telling about our children? Those we work with, those we parent, those we spy having a temper tantrum in the grocery store? What story do you want your students, children, or clients to tell about you? Dr. Robert Brooks often shares the story of a child who came to him because of severe school-avoidance. He asked the boy to draw a picture of his teacher. The drawing was that of a huge, red-faced, angry man with a screaming mouth that was wide enough to devour the small child who was cowering below. It is not the picture we want any child to draw of us. Showing that picture to the teacher was a powerful beginning to the solution for the school-avoidance problem.

Parents can help children solve problems, just as therapists help clients solve problems. Larson suggests we think of this activity as a dance, an orchestration that includes planning, organizing, balancing, anticipating, interpreting, forecasting, perspective shifting, and meaning making. The process of balancing takes into account the desires of individual family members, prioritizing occupations to bring harmony to the family in a way that creates stability within the family. Parents need to make key decisions when setting priorities and synchronizing occupations, and they then must select among competing needs to create a harmonious family environment.

Therapists often become scholars of the role between stress and immunity, anxiety and illness, and the connection between being unavailable to respond to life in a way that balances the little things with the big things and the overall feeling of well-being. Are you a parent? A teacher? Take a minute and think about how you respond when a child spills a glass of milk. Do you scream? Do you focus on the milk and the soaked items in its path? Or do you focus on the child; the one who accidentally reached too far or too fast and created a small disaster? Do you give the message that the child is the treasure or that the milk holds greater value? Do you take time to consider what influences the child's situation? For example, is he stressed because he's being rushed? Was the glass too big for her muscles to control? What is hiding in the background of the child's behavior? What is hiding in the background of your response? Granted, a gallon of organic milk can be priced like a treasure, but at the end of the day, will the liquid be important or will the spirit of your child? Sometimes we have to pause and reflect on what our priorities are.

I saw a note other day taped to a friend's bulletin board that was written in first-grader script: "Thanks for loving me even when I make mistakes." That's the note I want to tape up! Don't you?

NO PARENT, NO CHILD IS PERFECT

Being a good parent is not an innate skill, even though some people can make it look that way. We must resist comparing our inner selves with another person's outer self. I remember sitting in an audience once, behind a "perfect" couple—they had three "perfect" children. We were watching our son (who we all knew wasn't "perfect") deliver his kindergarten performance, knowing that just yesterday he had a tantrum so intense he broke the principal's phone. I was jealous of those parents sitting there with their cameras (being "not perfect," we forgot our camera). The next week, however, I got a call from this mom. Her son had been diagnosed with bipolar disorder, autism, and a string of other labels. As it turned out, the imperfections in their life made ours look much closer to the perfection that I had perceived theirs to be. I was flooded with compassion for my overly harsh, self-judged self who had been sitting in that audience.

The interactions between parents and their infants have been described as a dance—a dynamic, reciprocal exchange between the participants—and provide the basis for later motor, gender-role, social, cognitive, and language development. The nature of this parent-child interaction is thought to be a strong predictor of a child's optimal development.

How we play can be different, the roles within parenting can be uniquely constructed. Mothers play with their children; they play with toys, spend time reading with them, and engage in attention-getting activities. In contrast, Nakamura and colleagues found that fathers tended to spend more of their time engaged in play that was more physical: games that included bouncing, lifting, and rough-and-tumble play.

Parents are the conductors of the orchestra: family, chores, school events, spills, stomach flu, bike wrecks, and all that life brings to us.

Activities that are playful and engaging tend to invite greater participation. As a result of the meaningful nature of these activities, children can unknowingly practice important skills. Play researchers Knox, Schaaf, and Burke explain that environments that provide space for movement and exploration promote play and engagement. In contrast, those environments that constrain or confine movement by exposing the child to too many dangers (think of

being in the section of the store with lots of fragile glassware) inhibit play. Having options for play, with objects or people that entice children to touch and experience through their senses (touch, smell, taste, listen, move), can promote play. Environments that cause children to feel self-conscious or overwhelmed by novelty will tend to restrict play behaviors. Children want the opportunity to repeat experiences. Hitting the drum over and over or repeatedly singing the same song into a real microphone, a reverberating toy microphone, or even one made of a toilet-paper roll builds mastery. In addition, finding the “just-right challenge” is important for play; too much competition or too great a challenge can impede play and create frustration for your child.

In the clinical practice of occupational therapy, it is important to understand and address the needs of parents as well as the needs of the child being treated. More than 100 years ago, Antoine de Saint Exupéry’s *The Little Prince* taught us to understand “What is essential is invisible to the eye.” Olson and Esdaile’s seminal book on occupations of mothering suggest that even though the role of mother and the activities they engage in may be unseen, these essential efforts form a silent backdrop against which therapeutic efforts on behalf of a particular child are provided. A client and mother of a child with severe sensory dysfunction burst into tears at our clinic as she related the following story, revealing that initiating individual treatment for the child alone would not be sufficient intervention in this family:

I’m exhausted. My son won’t leave me alone, and if I try to give my attention to my daughter or, God forbid, to myself, Paul will have a meltdown. Yesterday we were at a restaurant. We were hungry and the food was taking forever to arrive. Paul began to scream and kick me. My four-year-old daughter got scared and started to cry and claw at me. We were essentially in a wrestling match in the booth of the restaurant and people began to stare, shooting those daggers of judgment I’ve become so used to. I asked for the food to be wrapped to go and endured the manager’s critical remarks while continuing to wrestle with my now completely out-of-control children. After we finally got to the car and I completed the battle to get them buckled in as they thrashed and screamed, I cried and cried. I am embarrassed to say this, but for a moment, I thought of just leaving them in the car and walking away.

You never know what is happening behind your neighbor’s closed door. Compassion is the antidote to judgment.

One day, my neighbor who had just had her second child approached me in the driveway on her way back from the mailbox. Usually perfectly quaffed, that day she had on shorts and a sweatshirt, her hair swept up in a straggly pony tail. I felt reminiscent of the joy I felt as a new mother and asked how she was enjoying her new life with a new baby. She told me:

All in all, we’re doing pretty well these days. Today was a particular scream. My mom is visiting and insisting on revamping the garden (which means she needs compost and a driver to take her to get some). My “dream baby” was unwilling to nap, my going-on-two-years-of-unemployment husband was at a job fair, and my four-year-old with a sensory processing disorder put down his beloved dinosaur toy and said “My tummy hurts” before proceeding to throw up in the pile of my new baby’s clean laundry! All the

while, I have not even brushed my teeth today, and I've not showered since Monday. But before I could take a single minute to take care of myself, I cleaned up my son's vomit; tucked him in with a heating pad, tea, and a Dora the Explorer video; began to rewash the baby's now barfy laundry; and surrendered MY kitchen to my mother as she made five dozen rolls for our family (although I am trying to lose the baby weight and am on a no-carb diet)! All I can do is laugh, although all I want to do is cry. I just hope that my laughter will fill my system with endorphins! Heaven knows I could use some.

Interventions should promote and sustain improved quality of life for families in the family system that they really live in. Interventions should use what we know about sensory processing and strategies that help children modulate sensation so they can do their good work (be a good friend, be a successful student, be an active participant in the family). More importantly, we want to translate what we know from the science of therapeutic intervention into the day-to-day lives people live. In so doing, we hope to offer a story of meaning, understanding, and ultimately management of the daily stressors that are indeed inevitable when raising a family. The idea of a “normal” child and a “normal” family only exists in statistically contrived numerical averages and standardized deviations. Parents who partner with a therapist to find meaningful interventions for their child can significantly change the trajectory of that child's development, opening the future to positive possibilities that would otherwise be missed. We see this every day; trust us—a lot of change in development can happen.

HOW WE MAKE SENSE OF OUR OWN WORLDS

The stories we tell are our way of explaining what we see; our explanatory model for how we make sense of our world. One's explanatory model is invisible but essential to the way a person experiences his or her world. We believe that children want to be good, and paying careful attention to their actions can teach us what may help them meet this goal. We strongly believe—and more and more the evidence is supporting our clinical intuitions—that interventions can facilitate the most significant improvements in function and satisfaction when those intervention are guided by strong evidence and theory. When working with children, we have developed some interesting protocols about how to approach some of the challenges that we stumble upon in therapy sessions with children; like how and why it is not the best idea to point with your middle finger, how to write on your homework page while never touching the “itchy” part of a pencil or hearing the irritating squeak of the lead across the page, and what to do with a booger when you have pulled it out.

Kids need to know the basics, and we try to answer their questions in the spirit with which they've been asked—with logic and a light-hearted commitment to solving real-world problems with the child. We hope to partner with you and share our understanding that we each, normally, have to problem-solve our way around extraordinary circumstances, puzzling child behaviors, and heart-breaking ignorance that judges us and leaves us feeling small. We can make a world of difference for families who feel lost in the chasm of day-to-day challenges. By helping families understand, find meaning in their occupational pursuits, and learn how to manage the inevitable stresses of life, we can help them open the door to health and well-being. Ultimately, our goal is to improve the quality of life for families raising a child with

a significant disability or even a child with a slight difference in development. Together, we can create a village that is welcoming, supportive, and provides a context in which children and their families can thrive. Between us, we bring more than 40 years of collective experience to this project. Perhaps more importantly, though, we bring the stories of those who have found supportive routines and rituals and gifted us with their lived wisdom: the families and children who have allowed us to be a part of their homes, their communities, and their village.

If we can, as a village of committed partners, translate some of our knowledge, journeying behind the doors of intervention for a number of children, and share our thought processes and resolutions, then perhaps we can begin to use the Little Prince's wise edict and harness the essential; that which is hiding in the background but ultimately creating barriers to well-being. For parents, we hope to convince you that no goal or desired therapeutic outcome other than improved quality of life in your family should be enough to have you open your wallet and pay for a session of therapy. We hope you will join our quest to build villages, ones with spirit and understanding, a common sense of determination to find the "just right challenge," and to remind ourselves to "put on our own oxygen mask first." We need to work as a team so we can ultimately love our children when he spills the milk or she wrecks the car, as well as all of the moments in between when our children make mistakes.

THE STORY YOU TELL MATTERS

When a new apple variety or rose emerges in a garden, we celebrate our good fortune—nature has created a new variety, a new lusciousness for our eyes or palate. Do we welcome the differences in children, encourage the uniqueness, and seek to make way for its optimal sweetness? Nature has an either/or message for us: grow or die. Water that does not move is putrid; plants that cannot push up from hardened soil wither and die. Fairies are said to be the tenders of nature, assigned to assure the direction of growth in individual plants. They stand by and whisper silently, "Grow." What does your child hear whispered?

Do you view your child as a disaster zone, always creating chaos? Or is her enthusiasm and curiosity viewed as the breeding ground for the next Nobel Prize winner? Are we promoting and nurturing growth and diversity? Children can be amazing scientists. They want to explore and test the world they live in. Some children are determined researchers; they test the world and those of us who live in it with an unrelenting commitment. Begin to think about how to help your child problem-solve and gather feedback, to look at the data he is generating and use that to form new hypotheses and create new (more adaptive) explanatory models. Encourage them to be researchers, to experience the world, to learn by sensing—feeling and touching and tasting and moving and seeing and hearing. This helps children think about what things are and how they work and to store the information in multiple ways (*how heavy, how soft, how salty, how fast, how bright, how rockin'*). Each time a child experiments, investigates, explores, and experiences the world through her senses, she builds on her ability to problem-solve, hypothesize, and invent. Because his exploration is interesting and meaningful to him, he develops a longer attention span, the ability to focus, and the likelihood to realize greater competency. Their memories are stored through many, many connections, linked with emotion, making them seekers of a greater sense of wonder. When a child avoids the world around her, she self-deprives, and limits her ability to learn or integrate her learning and is unable, then,

to apply discovery to solve the next problem. Children often need our help to make sense of what they are finding; if he feels overly bothered by tilting his head in the bath for a shampoo rinse out, he may come up with the faulty conclusion to his experiment that one must avoid baths all together. You can use the scientific method to become an aggressive researcher just like your child by observing the behavior you see, generating a question about that behavior, forming a hypothesis, and setting about gathering information or data to help you answer your question. Children teach us about their research questions, their hypotheses, their data, and their conclusions. It's our job to help critique and shape their scientific method.



But Miss Wendy, I like to eat my boogers—they're salty. My friends say I'm gross, and my mom gets mad at me, but I like it. What am I supposed to do?

Gabe, I have lots of other food that is salty and warm. Let's try some of those instead.

How do you understand this story? What meaning do you find in the child's story-telling to the therapist? We have to pause and disclose some of our fundamental beliefs. Children want to be good, to participate in their world, to learn and grow and be part of their social fabric. When that isn't happening, we need to identify for the child those characteristics that prevent optimal engagement and contribute to learning inefficiencies, irritability, and family impairment. When a child with a developmental delay in the sensorimotor is paired with an adult who is inflexible or has created a story about the child's behavior as something that will benefit from compliance to the adult's will, we can predict with high probability a less than optimal outcome. However, when a child-adult relationship is one with a good fit, the adult has the capacity for compassion and recognition of faulty processing hiding in the background of the child's poorly chosen strategies. In this case, we can predict a more satisfying outcome, one of collaborative problem solving and instruction. The adult might say, "I've noticed that bathtime seems especially irritating for you." Supporting the child as she sorts through the responses she

has at her disposal, being open to feedback, and selecting the one that will produce the most positive result will ultimately bridge the gap between the developmental delay and optimal growth. The key is, perhaps, being open to feedback. The adult must create a relationship of mutual respect and offer solutions that fit with the problem in order to build trust with the child as a collaborative problem solver. Although invisible to the eye, this *therapeutic alliance* is essential. A child's actions and habits are largely based on what they learn from their senses. Piaget, as well as other developmental theorists, pointed out that sensory information provides an important foundation for learning and behavior. We learn through the senses. All nerves to the brain are sensory nerves, bringing in information about how things look, feel, taste, smell, and sound. They bring in data on how heavy something is, or in what direction we are moving in relation to the environment. We then have to immediately and unconsciously organize what we take in; Have we seen this color before? Have we tasted this flavor before? Do we organize it with something we like or do not like? With this carefully categorized information, a reaction in direct response to our perception of sensation occurs. Knowing this process, we can observe behavior and know something about an individual's sensory perception. We can learn about sensory perception and processing and make good predictions about potential behavioral responses.

Kramer and Hinojosa's formative text outlines the theoretical framing of the function-dysfunction continuum when approaching treatment. When faulty sensory perception goes in, faulty motor responses come out of the nervous system. Dysfunction in sensory processing is a developmental delay, and deficits in the sensorimotor system can compromise a child's capacity to respond to adult directions without non-engaging behaviors. For example, when a child is overly focused on her internal sensations (tags irritating her, noise perceived as painful, a very distracting runny nose), she is not available to attend to external demands (looking at peers to recognize social cues or hearing the teacher's instructions). You may see a child crawl under the table and refuse to complete his math assignment when he is attempting to get away from the scratch-scratch sound of the pencils used by his tablemates.

FAULTY SENSORY PROCESSING = FAULTY RESPONSE (VIEWED AS DISRUPTIVE BEHAVIOR)

Understanding the problem may give adults better capacity to employ strategies that will net positive results. We all have some inaccurate perceptions of sensations, but the extent to which we have automatically or conscientiously employed compensatory strategies predicts our success in social relationships, work, and activities of daily living. Actions based on faulty processing of sensory input can result in faulty responses, which are often viewed as disruptive behaviors. Yet, if we can identify the sensory patterns or faulty false alarms (he brushed up against me and hurt me), we can begin to predict the less than optimal results (kicking, screaming, biting, hitting) of that faulty perception. The goal is to reduce the frequency, intensity, and duration of maladaptive strategies for coping with underlying sensory processing dysfunction. Socially disruptive behaviors can impair progress in academic skills, impede achievement of developmental milestones, and create impairment in family routines, social participation, and quality of life.

When incompatibility occurs between a child and the environment, we may see outbursts or withdrawal. When demands exceed a child's capacity to respond adaptively, we must seek

to make sense out of what the child's behavior is telling us. As adults, it is our role to take the child's perspective, to identify what barriers are in the child's way, and then to partner with that child to remove those barriers. Partnering with a child can improve her ability to participate in the occupations of a child: play, school, and being a cherished member of a family and a community.

We tell stories about children: *This child is the bad kid. That child can't behave. The child over there is a terror.* The stories we each tell are filtered to our own experiences, our expectations, and our internalized ideas. But as the adult, we actually get to recraft our own story and in so doing, the story of our children.

A psychologist once told a mom, "Your son is a bad child and you should tell him so." The mother tells this story years later with new anger and says, "I left that day and never took my son back to see that awful man. I held my son and told him he was good and I loved him every day after that. He is a fantastic young man; everyone agrees. Shame on that psychologist! He couldn't see my son's sweet spirit. Imagine if we had taken on his story about our child!"

We tell stories about children every day and they in turn create stories about themselves:

- Imagine your child comes home and says, "William's dad says I'm a bad boy." Allow yourself to just pause and sit with that message, let it sink in and experience that lack of social censure delivered from a father to a child and through that child to your child and now to you as the parent.
- Imagine your child comes home and says, "Mrs. Seik threw an imaginary drop of kindness today toward me but it landed like a boulder, making me feel warm and happy all over." Allow yourself to just pause and sit with that message, let it sink in and experience that social story delivered from a teacher to your child and to you.
- Imagine coming home from the hospital after visiting your sister who is fighting breast cancer, and seeing that a teacher has sent you an email saying, "I met with your son today to help him get caught up with his trumpet. Wow, he is a great kid."
- Conversely, imagine coming home from the hospital after visiting your sister who is fighting breast cancer, and seeing that a teacher has sent you an email saying, "Your daughter has to practice more. She was an embarrassment to herself today!"
- Imagine your child asking, "Mommy, am I a bad boy?"
- Imagine your child saying, "Dad, do you love me no matter what?"

We tell children stories . . . and children repeat those stories as fact.

In our work, we say, "You are a sweet child with a kind spirit, but sometimes your behavior and your words don't match your inner sweetness, and other people can't see your true self. We need to work together to develop better habits of using kind words and actions so you are a match inside and outside." We believe that children often are who you tell them they are, and become the adults you told them they would be. When we whisper to them, "You can grow this way . . . I have confidence that you can grow that way" . . . they may listen to us and grow in the direction of our story about them.

SNOT Protocol

Explaining to a Kid What a Booger Is and What to Do About One

Occupational therapists are health care practitioners who have received training to provide intervention for the occupations in your life, including areas of occupations related to taking care of your body.

These ADLs constitute actions within our day-to-day lives. Although most children learn the social rules of many ADLs, many of our children need to learn these rules in a more overt, direct way. We often need to articulate or narrate the mundane to make it obvious. Some children need help to control the muscles of the mouth so they can spit. Spitting is a critical skill for oral hygiene, eating, and swallowing. But by far, one of the most common complaints from adults is children who pick and eat their own boogers.

The SNOT protocol was developed to help children learn the social rules for the occupation of caring for the nasal region of the body. Taking a sensory approach, the nostrils, or *nares*, are interesting holes in your

head. They are highly innervated and hyper-responsive to the smallest amount of debris lodged on the skin or dangling on one of the many hairs that serve as protectors against infection. The nose is an erogenous zone, although perhaps you haven't conceptualized it in that way. The nares lead straight to the brain and channel sensation of smell immediately to the sensory nerve for olfaction. Olfaction is the only sense that does not pass first through a relay station in the brain, so you can think of it as a nonstop flight. Conversely, the sensory pathways involving vision, touch, hearing, proprioception, vestibular, and taste all have layovers at various airports in the head.

Olfaction is primitive, and tactile input in this region is, by neuroanatomical design, quite alerting (or bothersome). When dirt or dust gets in our noses, it gets stuck in nose hairs, and the mucus or snot surrounds it, traps it, and makes it into a tiny trash package ready for removal. Those "cornflake" projectiles in the nostril feel like boulders and not specks, getting our attention, and we are highly incentivized to remove them.

Talking about boogers is not "polite talk," and children are often left to their own resources to figure out this system. Even though the nose does have mucus instead of snot, there is no medically euphemized or socially appropriate word for *booger*. A booger is a booger. And kids love to hear an adult say that. Like, instead of *snot*, we say "mucus," but if it's a booger, it's a booger.



Children have an innate drive to seek meaningful experiences from their environment even if the adults don't like how they've chosen to do so...

Grossology (fun science about yucky stuff in your body) is an area of great interest for most kids. Mucus is important and is found all over nature, coating your skin and hair and all your organs. Boogers are dried-up snot or trapped material you have inhaled such as dust, pollen, sand, fungi, smoke, and germs. Mucus traps those potential invaders and keeps them from getting into your lungs.

Because the body has worked hard to trap and remove the dirt, you too want to get it out. If you remove it with your finger, you have that dirt on your hand and then it is transferred to anything you touch. If you eat it, you're eating that dirt or germ so your body went to all that trouble to take out the trash and you brought it back inside. (Yuck!). If you wipe those germs on your sister, then that is gross too. This is why grown-ups nag you to put it into a tissue and toss the tissue with the snotty booger into the trash. You've helped your body get rid of a problem and haven't made your booger someone else's problem!



How many other words for Boogers can you come up with?

loogie
ball of snot
cornflake

[illegible]

What are ways that you can deal with a Booger that are okay for your health and don't gross other people out?

[illegible]

PART II

Framing the House—Incorporating Theory Into Interventions

*Remember the African proverb,
“A child does not grow up only in a single home.”*



Dr. A. Jean Ayres was a visionary scientist whose research led her to theorize what is now known as the *Sensory Integration Theory*. Dr. Ayres's work explained what she observed to be patterns of developmental delays in children with learning inefficiencies and deduced the association between sensory input and behavior. Dr. Ayres's theory is grounded in developmental principles and neurological postulates. Sensory integration is considered a developmental process. As a neuroscientist and an occupational therapist, Dr. Ayres used her theory to explain her observations and design interventions guided by principles of neurobiology to resolve fundamental deficits that impact the occupations of the child (the occupations of learning, play, and being a family member). Postulates or fundamental core assumptions of the theory begin by stating adequate processing and integration of sensory information and are an important foundation for adaptive behavior. The work of occupational therapists has evolved to include Sensory Integration Theory assessment and treatment using the Ayres Sensory Integration Approach (OT-SI). Some practitioners have begun to use the term Sensory

Processing Disorder (SPD) although this is not an established diagnosis. Still, SPD is being used with increasing frequency.

And, it is important to note that all individuals process sensation in our own, unique way, so a diagnosis of Sensory Processing Disorder would only be pertinent when such difficulties impair day-to-day routines or roles. When sensation is perceived in a faulty manner, predictable faulty behavioral responses might include sensory defensiveness or poor modulation, and this will result in poor self-regulation, emotional volatility, and maladaptation across environments. The story we tell is our way of explaining what we see, it is our *explanatory model* for how we make sense of our world. Individuals' explanatory models are invisible but essential to the way they experience their world. If we have an explanatory model of a threatening sensation, we will react with fear and anxiety. Maladaptive emotional regulation can look like hitting, kicking, lying, acting "weird," and biting, while adaptive regulation looks more like asking for a do-over, matching our face to our feelings, or using a sensory strategy to get unstuck and move forward with a new plan. Sometimes emotional regulation can take the form of self-stimulation, which, depending on the circumstances, can be either adaptive or maladaptive. We would consider publicly picking one's nose or self-stimulation of the genitals maladaptive (but in private these behaviors would not necessarily be considered maladaptive).

THE SENSORY INTEGRATIVE PROCESS

Theory guides practice and provides a mechanism from which to frame observations and strategically guide interventions. In the foundational text *Frames of Reference for Pediatric Occupational Therapy*, Schaaf, Schoen, Smith, Roley, Lane, Koomar, and May-Benson worked together to outline 10 postulates of Ayres's sensory integration theory with which to help guide the practice. The postulates align with The Village Framework and support the premise that children have an innate drive to seek meaningful experiences from their environment, and that development of sensorimotor fluency follows a developmental arc. The postulates can be summarized and applied to our purpose.

The first postulate states an optimal state of arousal is a prerequisite for adaptive responses to occur. If an individual has a heightened emotional response to an event in the environment or is in a pervasively heightened state of arousal, that person will likely respond to the events in the environment in a way that may be viewed as overresponsive. In other words, the person is likely to show a lack of resilience when asked to respond to environmental encounters in a developmentally appropriate range of emotion or attention. However, even though this response will be consistent with the child's perception of the environmental precipitant, it may seem maladaptive to other observers in the environment.

Next, sensory integration occurs during adaptive responses. The more opportunities a child has to learn to respond in adaptive ways, the greater the development within that system and subsequently to progress toward integration within the nervous system. Third, multiple sensory systems may be needed to facilitate an optimal state of arousal. Think about hearing someone scratch fingernail across a chalkboard: your immediate response is to employ a second sensory pathway to help you organize that sensation. We can predict, from neurology, what

choices you may make. You might scream or jump up and leave the room in an attempt to avoid the sensation. This is both a limbic and a motor response. You might grit your teeth or provide pressure to your ears; each a sensory compensation response. Other examples include chewing gum, chewing on your pencil, or drinking something hot such as coffee to help you feel organized when you are nervous.

The fourth postulate suggests that adaptive responses must be directed toward a child's current developmental level. Similarly, the fifth postulate states activities that reflect a *just-right challenge* and occur within what Vygotsky coined as the *Zone of Proximal Development*. The just-right challenge provides a milieu for sensory integration to occur. And the just-right challenge is interrelated with conditions in the environment that serve as deterrents or encouragers of development.



It is important to balance developmental readiness and safety.

Let's take, for example, the developmental skills necessary to open a door by turning a doorknob. Fundamental abilities include gross grasp, wrist stabilization, forearm rotation, activation of large muscle groups, and momentum. Meanwhile, the use of chopsticks or a carrot peeler would require more advanced abilities, which also include skilled prehension and finger dissociation.