Part Four:

Home, School, and Family Approaches

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Developmentally Appropriate Interactions and Practices

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Chapter 4 describes developmentally appropriate interactions and practices recommended for all children so that they can master the challenges of the particular stage of development through which they are passing. As described, however, children with special needs present special challenges to this general recommendation. Their processing challenges and functional developmental difficulties make it very difficult for therapists to create developmentally appropriate interactions. For example, how does a therapist create appropriate interactions for a preschooler who is avoiding human interaction by running away from people as soon as they come near? How does a therapist interact with a child who only wants to line up his toys or rub a spot on the floor over and over? What is the best tactic for comforting a child who is so oversensitive to sound and touch that she withdraws from the human world? Therapists must deal with these and other special challenges to implement developmentally appropriate practices and interactions for children with special needs.

In order to systematically develop appropriate strategies for the child with special needs, it is important to assess the child's functional developmental levels (attention, engagement, nonverbal reciprocal gesturing, complex problem solving, creative use of ideas, and abstract and logical thinking) and processing profile (auditory, visual-spatial, motor planning and sequencing, and sensory modulation). This assessment enables the construction of patterns of interactions tailored to each child's unique profile.

These patterns of interaction, however, must be available throughout the child's waking hours. Making them available only during therapy sessions will not be sufficient. For example, if a child is allowed to be self-absorbed and perseverative for 80% of his day and is developmentally appropriate for only 20%, most of his learning will be maladaptive rather than adaptive. On the other hand, if individually tailored interaction patterns are an integral part of all of his daily activities, he has an opportunity to learn adaptively throughout the day.

There are three types of developmentally appropriate interactions and practices that need to be part of the child's daily routine:

1. *Spontaneous interactions during which the caregiver follows the child's lead and helps her elaborate,* often referred to as floor time.

2. *Semistructured, problem-solving interactions,* during which specific learning objectives are worked on through the creation of dynamic challenges that the child wants to solve.
3. *Motor, sensory, perceptual-motor, and visual-spatial physical activities* to strengthen important processing foundations.

This chapter describes each of the three types of developmentally appropriate interactions in more detail. First, however, a description of the "generic" interactive processes that should be a part of all three types of developmentally appropriate practices is necessary. In essence, in every interaction with a child, the parents, caregivers, and educators should promote attention, engagement, a continuous flow of two-way communication with gestures and, when possible, ideas. At the same time, adults must tailor these interactions to the child's functional developmental level (e.g., fostering engagement or the elaboration of ideas) and individual processing differences (e.g., emphasizing visual-spatial or auditory processing, or being especially soothing with a sensitive child or animated with an underreactive child). These developmentally appropriate interactions, which meet the child at his functional developmental level in the context of his processing differences, are referred to as "floor time."

GENERIC PROCESSES COMMON TO ALL DEVELOPMENTALLY APPROPRIATE INTERACTIONS

Until a child is well into her school years, parents and caregivers will frequently interact with her when she is down on the floor, where she feels most comfortable and is surrounded by her toys and playthings. When interacting eye-to-eye with a child, the adult generates a sense of equality that encourages the child to engage, take initiative, and act more assertively. Parents and caregivers also operate in a child's realm when they playfully make funny faces while changing a diaper, chatting at the dinner table together, visiting the supermarket, or going for a walk outside. Thus, the generic processes can occur anywhere and at any time the child and her caregiver are interacting in a way that mobilizes the child's interests, initiatives, gestures, and ideas. The foci of the generic processes follow. (In this discussion, the term "partner" means the therapist, parent, caregiver, or any other person engaged in floor time activities with the child.)

- *Engage and let the child set the emotional tone.* Partners can be very animated, using hand gestures and various facial expressions, as they encourage the child to choose any activity for them to do together. With a child operating at early developmental levels, partners can join in on whatever the child is doing at that moment, such as clapping, making noises, or wandering around the room. Attempting to capture the child's rhythm, intensity, and interests creates an important foundation for the initial sense of engagement and the interactions that will build on it.
- *Open and close circles of communication.* As partners follow a child's lead and build on his interests and overtures, they should inspire him to build on what has been done or said in turn. For example, if a child moves his toy car and the partner moves another car parallel to it or says "Where are we going?" or "Can my dolly have a ride in your car?," the partner is opening a communication circle. If the child gestures or verbalizes in response, building on his behavior by saying "We go to house!" or simply bangs his car into the partner's car while giving a knowing look, he is closing that circle of communication. Even when a child responds with a

simple "No" or "Shh!" or by turning away, he is closing the circle of communication. The goal is to facilitate a continuous flow of circles in both unstructured and semi-structured interaction. Sometimes these circles will involve only the simplest back-and-forth gestures, such as looking, smiling, or pointing.

One way to extend constructive interactions with a child is to help a child reach a goal. For example, a child might be looking longingly, and pointing, at a toy fire engine placed beyond his reach. The partner can retrieve the toy, turn to the child, gesture, and ask "Want it?" When the child responds with a big smile and reaches for the toy, the partner has helped the child reach a goal as well as extended the interaction.

- *Use playful obstruction to expand circles of communication.* Sometimes, it may be necessary to expand play or conversation with a child by interacting in a playfully obstructive manner. For example, if a child avoids her partner during floor time, the partner might try positioning herself between the child and whatever is absorbing all the child's attention. Alternatively, the partner can assume the role of a moving, talking fence that the child needs to climb over or under to reach her favorite toy or simply to continue wandering around the room.
- *Increase the emotional range.* In creating developmentally appropriate interactions, it is helpful to look for opportunities to extend the child's gestural interactions or add a new twist or plot line that builds on a child's interests. In this way, over time, a child will become engaged in all the marvelously varied themes of life: closeness and dependency; assertiveness, initiative, and curiosity; aggression, anger, and limit setting; and pleasure and excitement. These experiences will help the child develop a full range of emotions.

Many times, a child will avoid or neglect certain types of interactions, despite a person's best efforts to foster a supportive floor time environment. When this occurs, it is appropriate to gently challenge the child in those emotional areas that she seems inclined to bypass. For example, a child may be wonderfully easygoing, but a little passive in asserting herself and claiming her own toys during playgroup. A partner could encourage the child to be more assertive by doing something as simple as moving her favorite stuffed animal away from her group of animals. In so doing, the partner should appear impish, rather than malicious, and move the toy away very slowly and deliberately, in a smiling, nonthreatening manner. The child may very well assert herself and come after her prized toy!

If a child's interactions involve pretend play and use of words, but the interactions focus disproportionately on themes of anger and aggression, the partner should not interfere with the dramatic flow by stopping the action or by asking a verbal child questions such as "Why is (the character) so mad?" or "Why doesn't (the character) behave nicely?" Instead, it would be appropriate for the partner to join in the action, slow it down if it's getting too active, and elaborate on the emotion through his (the partner's) own actions. For example, if the child is banging the doll, the partner might begin banging a doll, but gradually turn the action toward slow, interactive banging. If the child is verbal, the partner might comment, "Gee, he really wants to bop those bad guys. He's going to destroy them in a hundred different ways. I bet he must have a good reason for that!" By

acknowledging both the depth of anger that the child is portraying, and the fact that he must have good reason for it, the partner is empathetically engaged with him rather than promoting his own agenda. It is this kind of empathy that eventually helps a child learn to be empathic and kind.

The imaginative and verbal expression of feelings usually helps a child learn to understand and regulate them. A child tends to act out strong feelings (such as anger) that aren't acknowledged, either directly through aggression, or indirectly through an opposite response, such as being overly inhibited or fearful. Acknowledgment of a child's feelings does not imply that a person approves of a child acting them out in reality. In fact, recognizing a child's "pretend" agenda will help the child use ideas rather than actions. It will also strengthen a partner's ability to discuss and set relevant limits on aggressive behavior if it should emerge at school or at home during nonpretend times.

By broadening a child's emotional themes, floor time interactions supplement discipline. When a child is misbehaving, pretend drama can sometimes help reveal what the child is feeling. Surprisingly, acknowledgment of a child's negative, angry feelings may eventually help him introduce positive themes into his dramas. Most children have a balance of feelings. If the partner conveys an empathetic message that it is acceptable for the child to explore aggressive themes during play, the child will begin to explore dependency, love, and concern, too. However, if a child senses that his ideas are not understood, his frustration may cause him to polarize his feelings and opt for aggressive themes. Preverbal children can often explore aggressive intentions through their actions, for example, by banging a car. When a partner joins in empathetically (e.g., by also banging a car) and then slows the action down and explores other options, it is possible to convey understanding, regulation, coping, and alternatives to the child.

- *Expand the range of processing capacities.* While a child is engaged with sounds, sights, touches, and movements, partners can make a conscious effort to appeal to her different processing and motor-planning capacities. In this way, the child's "mental team"—that is, all her emerging capacities—learn to simultaneously work together under the direction of an emotionally meaningful goal. For example, during a floor time session in which the child is moving a toy trolley, a partner can introduce some visual and spatial elements into the noisy play by having a house suddenly cover the trolley. This action may inspire the child to search for the disappearing trolley, thus adding a visual-spatial processing activity to her motor activity and stimulating her emotional interest in finding the toy. In a similar manner, spatial play during floor time—such as building block towers and forts—can also promote a child's ability to broaden the range of her processing and motor capacities.

THE THREE TYPES OF DEVELOPMENTALLY APPROPRIATE INTERACTIONS AND PRACTICES

The generic processes just described are basic to all three types of developmentally appropriate interactions and practices that are part of a comprehensive home and school program. Detailed discussions of all three types follow.

Spontaneous, Follow-the-Child's-Lead Floor Time

In the preceding section, the term "floor time" referred to the process, or concept, through which therapists, parents, and other caregivers make a special effort to tailor interactions to meet the child at his unique functional developmental level and within the context of his processing differences. In this section, "Floor Time" is a specific practice that incorporates this process. Floor Time sessions focus on having partners follow the child's lead to encourage the child's initiative and purposeful behavior, deepening engagement, lengthening mutual attention, and developing symbolic capacities. The length of the sessions will depend on how long it takes the child to "warm up" and become fully engaged as well as how long it takes the child to create and expand on new gestures and/or ideas. Daily opportunities for 6 to 8 or more sessions lasting between 20 and 45 minutes each are often recommended.

Basic Principles of Floor Time

There are several basic principles of Floor Time:

- *Follow the child's lead.*
- *Join in at the child's developmental level and build on her natural interests.* Through your own affect and action, woo the child into engaging with you (go for the gleam in her eye).
- *Open and close circles of communication* (i.e., build on the child's interest and then inspire the child to, in turn, build on what you have done or said).
- *Create a play environment* with rattles, balls, dolls, action figures, cars, trucks, schools, etc. *that will provide a vehicle for the child's natural interests and facilitate opening and closing circles of communication* (e.g., some children do better with a few selected toys whereas others interact more with many toys). Avoid very structured games that reduce creative interaction.
  - Extend the circles of communication.
  - Interact constructively to help the child reach his own goals (e.g., hold up the truck he wants so he can reach for it).
  - Interact playfully, but obstructively, as needed (when the child is avoiding interaction, position yourself between the child and what he wants to do to encourage him to interact with you (e.g., hide the child's car in your hand so he is inspired to search for it, or build a little fence around the child with your arms so that he needs to duck under, push up, or say "out" in order to return to moving around the room).
- *Broaden the child's range of interactive experience.*
  - Broaden the thematic and/or emotional range.
    - Enjoy and engage in play dealing with the different themes of life: closeness and dependency; assertiveness, initiative, and curiosity; aggression and limit-setting; and pleasure and excitement.
    - Challenge the child to engage in neglected or avoided types of interactions (e.g., for a passive child who avoids taking the initiative, slowly and smilingly move away the toy the child is playing with, thereby challenging the child to take the initiative and come after it).
- *Broaden the range of processing and motor capacities used in interactions.*
  - Engage the child with sound and/or words, vision, touch, and movement (e.g., while playing with cars, make racing sounds or discuss where the

cars are going; look for the house or school the cars are going to visit).
  - Challenge the child to employ underused or avoided processing capacities (e.g., if the child moves her car alongside yours, but ignores your sounds and words and doesn't make sounds on her own, block the child's car with your car and challenge her to make a noise or say "go" to get your car to move out of the way. For a child who moves her car in only one direction, construct various barriers that encourage her to move the car in different directions).
- *Tailor your interactions to the child's individual differences in auditory processing, visual-spatial processing, motor planning and sequencing, and sensory modulation.*
  - Profile the child's individual differences, based on observation and history.
  - Work with the individual differences. Utilize natural strengths for interaction (e.g., visual experiences for the child with relatively strong visual-spatial capacities). Gradually remediate vulnerabilities (e.g., provide extra practice in listening to and using sounds and words for the child who has a receptive language or auditory processing challenge. Be extra soothing for the sensory-overreactive child and/or extra compelling and animated for the sensory-underreactive child).
- *Simultaneously attempt to mobilize the six functional developmental* levels (attention, engagement, gestures, complex preverbal problem-solving, using ideas, and connecting ideas for thinking). Younger children or children with developmental challenges will master the later levels as they develop.

Mobilizing the Six Functional Developmental Levels During Floor Time

During Floor Time, therapists and caregivers use developmentally appropriate interactions to mobilize the six functional developmental levels. Strategies for accomplishing this at each level follow.

1. **Shared attention**
   - Use the child's individual sensory and motor profile to draw him into shared attention (e.g., more visual experiences for the child who especially enjoys looking).
   - Harness all the available senses, as well as motor capacities and affects (e.g., combine highly enjoyable activities with interactions that involve vision, hearing, touch, and movement).
   - Use both constructive and playfully obstructive strategies (e.g., dance or run together with the active child; build a fence with your arms around the child who likes to avoid or run away).
   - Stretch the child's capacity for shared attention by increasing the interactive circles of communication rather than by trying to get the child to focus on a particular object or toy.

2. **Engagement**
   - Follow the child's lead in order to engage her in interactions that bring her pleasure and joy.
   - Build on these pleasurable and enjoyable interactions.
   - Join in the child's rhythm in terms of affect, visual, auditory/vocal, and motor movements.
   - Become part of physical objects that bring the child pleasure (e.g., put the car he is fascinated with on your head

and let him roll it on your head as though it were a mountain).
- Attempt to deepen the warmth and pleasure by giving priority to her comfort and closeness (soothing, rhythmic activities or sensory-organizing ones may be helpful).
- If necessary, use a little bit of playful obstruction to entice him to focus on you. (Engagement involves a range of emotions, from pleasure and warmth to annoyance and assertiveness.)

3. **Two-way, purposeful interactions with gestures**
   - Be very animated and attempt to exchange subtle facial expressions, sounds, and other gestures (i.e., entice her into a rapid back-and-forth rhythm).
   - Go for the "gleam in his eye" (e.g., use animated exchanges to entice him to enter into an alert, aware, involved back-and-forth pattern).
   - Open and close circles of communication by building on her natural interests, inspiring her to respond to what you do. Keep it going as long as you can.
   - Treat everything she does as purposeful to harness circles of communication (e.g., flapping hands could be the basis for an interactive flap-your-hands dance or for a game of waving at each other).
   - Encourage initiative by avoiding doing things for him or to him.
   - Support initiative by challenging him to do things to you (e.g., when rough-housing, get him to jump on you, push you down, or climb up to your shoulders. This is in contrast to your doing things with him, such as picking him up and swinging him, which do not support his initiative.)
   - Help her go in the direction she wants to by initially making her goal easier to achieve, such as by moving the desired ball closer to her.
   - Help him be purposeful by creating a goal where none may appear to exist (e.g., if he is moving his car around in a back-and-forth motion, you might stand behind the schoolhouse and claim to need a delivery).
   - Over time, build obstacles between her and her desired goal to increase the number of circles of communication (e.g., block her access to the door or turn the doorknob the wrong way).
   - As needed, be playfully obstructive (build fences around him if he is aimless; get between him and his goals when he is repetitive or perseverative, such as getting stuck behind the door he's opening and closing).

4. **Two-way, purposeful problem-solving interactions**
   - Extend circles of communication by creating extra steps (e.g., play dumb so he has to show you how to open the door, or exclaim and gesture that you first need a delivery at the hospital when he is moving the car toward the school).
   - Extend circles of communication by being playfully obstructive and creating interesting barriers or obstacles to his goals.
   - Work up to a continuous flow of circles (e.g., some children will gradually go from three circles, to five, to ten, etc.; others will enter into a continuous flow of 30-plus circles quickly).
   - Challenge her to close circles of communication (e.g., if she is moving her

car, but is ignoring your request for your dolly go for a ride in it, block her car with your hand. Gesture in an animated fashion for her to give the dolly a ride.)
- Combine affect with action and interaction (i.e., always be animated and show affect through voice and facial expressions while creating interactions).
- Increase the interactive range, including affects and emotions (e.g., if he is just hugging a doll, become a trouble-making wolf so that the child becomes challenged to increase his assertiveness and knock the wolf away).
- Increase interactive range in different processing areas, including:
  - Visual-spatial (e.g., play games such as chase, hide-and-seek, or treasure-hunting).
  - Motor planning and sequencing (e.g., organize obstacle courses and search games where the child has to complete two or three actions before he can open the latch to find the cookie).
  - Perceptual motor (e.g., engage in looking/doing interactions such as rolling, throwing, and/or kicking Nerf balls back and forth, or making her reach for desired objects on a moving string [while crossing the midline]).
  - Auditory processing and language (e.g., use sounds and, when possible, words to communicate [e.g., use animated, compelling vocal tones to attract his attention or to indicate safety, danger, approval, disapproval, or excitement]).
  - Imitation (e.g., draw her into copycat interactions where she is shown how to reach for or get something she wants, or to imitate a sound that will get her something she wants).

5. **Elaborating ideas**
   - Encourage the use of ideas in both imaginative play (e.g., hugging the dolls) and realistic verbal interactions (e.g., "open" the door).
   - Build ideas by using affect or intent (e.g., "want juice!" rather than labeling juice in a picture).
   - W(ords)A(ffect)A(ction)–Always combine words or ideas together with affect and action.
   - Chit-chat using words; talk constantly.
   - Encourage imagination by incorporating familiar interactions in pretend play (e.g., feeding, hugging, or kissing dolls).
   - Jump into a drama that he has begun. Become a character and ham it up. Communicate mostly as the character rather than as yourself.
   - Sometimes, alternate between being a character in a drama of her choosing and a narrator or commentator.
   - Periodically, summarize and encourage him to move the drama along by asking a question or presenting a challenge.
   - Entice her into long dialogues.
   - Create challenges where ideas or words are necessary (e.g., "up," because the desired action figure is up on the shelf). Keep extending the dialogue.
   - Encourage the use of all types of ideas (symbolic expression) (e.g., pictures, signs, complex spatial designs [building a city], and acting out roles oneself).

6. **Building bridges between ideas (emotional thinking)**
   - Close all symbolic circles in both pretend play and reality-based dialogues (e.g., challenge him to always respond to what you are saying and doing, just as you respond to what he is saying and doing).
   - Challenge her to connect different ideas or subplots in a drama.
   - Whenever he seems confused, introduces something out of context, or if something seems fragmented or piecemeal in his thinking, challenge him to make sense and be logical. Let him, not you, supply the missing pieces of logic (e.g., "I'm confused. We were having a tea party and now we're flying to the moon? What happened?")
   - Be patient and summarize the confusing elements. If she is not able to build bridges between her own ideas, provide some multiple-choice possibilities. Avoid supplying the answer or taking control of the discussion.
   - Challenge with "wh" questions, such as "what," "where," "when," "who," and "why."
   - When he ignores or avoids responding to "wh" questions, such as "What did you like at school today?," throw out some silly possibilities to stimulate thinking (e.g., "Did the elephant visit your class today?" or "Did you see your boyfriend [or girlfriend] in class?").
   - Explore reasons for actions or feelings (e.g., "Why are you attacking me?").
   - Use multiple choice as needed, always putting the likely answer first and the unlikely one second.
   - Have your character in the pretend play create unexpected situations to challenge her to move toward creativity and new solutions. Use humor, conflict, and novelty.
   - Challenge him to broaden the emotional range in his dramas (e.g., encourage play that includes caring as well as assertiveness and aggression).
   - Encourage reflection on feelings in both pretend dramas and reality discussions (e.g., "Why do you want to go outside?" or "What's the reason for the attack?").
   - Gradually increase the complexity of reflective thinking (e.g., challenge the child to give different reasons or motives for actions or consider different views—"How does Sally feel after Mary took her toy?" and "How does Mary feel?").
   - Challenge the child to give opinions rather than facts (e.g., "What color do you like best and why?" rather than "Which color is this?").
   - Engage in debates and negotiations, rather than simply stating rules (except where the rule is absolutely essential).
   - Encourage choices and discussions of choices.
   - Encourage and challenge the child into a back-and-forth use of ideas—the more, the better. This is more important than correct grammer.
   - Increase spatial thinking (e.g., treasure hunt games or junior architect games, such as laying out a whole city for the action-figure drama).
   - Encourage motor-planning and sequencing capacities (e.g., obstacle courses, drawings diagrams for a tea party).
   - Encourage understanding and mastery of time concepts by challenging the child to use the past, present, and

future (e.g., "What are the space monsters going to do tomorrow?" or "Yesterday we went to the zoo. What would you like to do tomorrow?").
- Encourage understanding and use of quantity concepts (e.g., how many cookies should each doll at the tea party have?).
- Pre-academic or early academic work, complex problem solving, and social skills should be based on providing an understanding of basic concepts (i.e., connecting ideas) through emotional interactions. For example:
  - In math, negotiate using candies, cookies, or coins to learn adding or subtracting. Keep the numbers small to avoid rote memory responses. Eventually, work on visualizing the objects and doing the calculations using images.
  - In reading, visualize or picture what is being read (whether the parent or child reads it) and then act it out and/or discuss it. Embellish the ideas further.
  - In writing, initially use flexible spelling and word choice and focus on interactive, creative stories and communicating needs or opinions. Later, work on correct spelling and grammar rules.
  - For problem-solving and social skills, work on anticipating by visualizing what may happen later or tomorrow, including positive and negative situations. "Picture" the situations, feelings involved, typical solutions, and alternative ones.
  - In both pretend and reality-based conversations, challenge the child toward higher levels of abstraction by shifting back and forth between the details (the trees) and the big picture (the forest). For example, periodically wonder how all the things the child has been talking about fit together.
  - Gradually expand the child's range of experiences (without overload or over-stimulation) because emotionally based experiences are the basis for creative, logical, and abstract thought.
- Challenge the child to symbolize auditory, visual-spatial, tactile, motor-planning, and affective capacities in combinations (e.g., building a city [visual-spatial, motor planning, tactile] with different dramas being acted out [auditory-verbal, thematic, imaginative] involving creative, affective interests being played out in a pattern of integrated thinking).

Semistructured Problem Solving

Semistructured problem solving is the second of the three types of developmentally appropriate interactions that should be part of every child's comprehensive home and school program.

Basic Principles of Semistructured Problem Solving

Semistructured problem solving involves a shared agenda, where the caregiver can teach a child something new by setting up challenges for the child to solve. The challenges can be structured learning activities that are meaningful and relevant to the child's experiences, or they can be spontaneous challenges, such as when the child has to solve a problem or confront something different in his environment to get something he desires. The caregiver can create a new problem-solving challenge whenever it becomes

evident the child may want something. Because problem-solving interactions involve creating challenges that motivate the child, semistructured problem solving is similar to following the child's lead, which builds on the child's interests and motivations. In problem-solving interactions, however, the caregiver helps to create these interests and motivations.

Problem solving can take different forms and require multiple interactions, such as expressing a new word(s) or gesture, learning a new concept, manipulating an object (motor planning), sequencing a series of steps to obtain an objective, or negotiating a turn or trade. For example, putting a child's favorite toy outside the door and challenging her to say "open" will help her learn what "open" is and to say the word "open" when she is feeling a strong desire (affect) to open the door. Purposeful gestures, words, concepts, and the use of pictures and signs can all be taught through problem-solving interactions (e.g., the child uses pictures, signs, and, gradually, words to convey "open," "juice," or "more").

The amount of time spent on semistructured problem solving will vary depending on the developmental level of the child, how purposeful he is, and specific areas of need, such as the need to increase gestural communication, language and concepts, or motor planning. Semistructured problem-solving interactions may occur from 3 to 6 times a day, for 15 minutes or more each time. Those children requiring more semistructure may have as many as five to eight sessions a day.

Problem solving interactions can occur during daily routines, with enough time allowed for extended interactions. Problem solving also can be added to activities such as finger plays and songs (e.g., "If you're happy and you know it" or "Simon Says"); social games (e.g., musical chairs, duck-duck-goose, hot or cold?); listening-auditory games ("Telephone," "Who, What, Where am I?," "Treasure Hunt-Blue's Clues"); board games (e.g., Barnyard Bingo, Memory, Mystery Garden, Connect Four); and book-picture telling. The key is to challenge the child to solve a problem generated by the game.

For children who are unable to imitate, more structured learning and behavioral approaches (such as TEACCH, Discrete Trial, and special education) can be implemented to teach imitation, motor planning, and problem-solving patterns. Once a child can imitate and problem solve, dynamic challenges should be used to teach new skills.

Each functional developmental level involves characteristic patterns of interaction and underlying processing abilities. Developmentally appropriate practices that involve semistructured problem-solving tasks and specific therapeutic interactions can, therefore, be geared to each functional level and underlying processing capacities. The following outline describes how semistructured problem-solving activities can be oriented to each functional developmental level and related processing abilities. This outline also includes comments on the different therapies that can be used in a semistructured problem-solving manner and that should be part of the plan that the therapeutic team develops.

Semistructured Interactions for Mastering The Functional Developmental Levels

Foster shared attention and engagement by creating interactions that:

- Mobilize pleasure and joy.
- Sustain a state of shared attention and engagement, in which the child wants to relate to another person.

Fostering attention and engagement also involves the infant's or child's ability *to use her interest and growing pleasure in others* to

give purpose (or function) to processing capacities and vice versa (i.e., improving processing capacities enables the child to attend and engage more fully). This includes creating interactions that enable the child to:

- Engage in pleasurable experiences with caregivers and express the affects of joy, curiosity, and emotional interest.
- Modulate sensation in all the senses (i.e., cope with and not be compromised by sensory hyper- or hyporeactivity).
- Comprehend information through each sensory pathway (e.g., sights, sounds).
- Integrate information from the different senses.
- Begin to plan and sequence motor patterns or behavior (e.g., look and/or reach).

Specific interventions have been developed to strengthen these core processing capacities. In addition to spontaneous interactions, these interventions can be implemented through semistructured activities by different members of the therapeutic team in collaboration with the home and school. Specific therapeutic interventions include:

- Physical therapy for muscle tone and motor capacities.
- Sensory integration oriented occupational therapy for sensory modulation, processing, and motor planning.
- Speech therapy for auditory processing and oral motor functioning.
- Spatial and perceptual-motor approaches for visual-spatial and perceptual-motor capacities.

Foster intentionality, two-way affective signaling, communication, and multiple problem-solving interactions (a continuous flow of circles of communication) by creating interactions that enable a child to:

- Be purposeful, even if she appears aimless or repetitive (e.g., lining up toys). Build on what the child is doing through your response, and inspire the child to close the circle by building on that response. Keep the process of opening and closing circles going as long as possible.
- Incorporate a range of emotional interactions (e.g., for closeness, hugs; for curiosity, searching).
- Increase the complexity of interactions and problem-solving challenges (e.g., going from simple peek-a-boo type interactions to searching for hidden objects and imitating motor gestures and sounds).

In addition, use the child's *emotional intent* through problem-solving interactions to harness the following processing capacities, which in turn will support higher levels of intentional communication. Create interactions that enable the child to:

- Connect affect (i.e., intent, motivation, desire) to motor-planning and sequencing capacities to give direction and purpose to behavior beyond that needed to meet simple needs.
- Connect intent to sensory processing channels (e.g., touch, vision, hearing) to give functional meaning to experiences and objects.
- Strengthen perceptual-motor capacities and gradually increase distal perceptual-motor capacities in relation to proximal ones. Initially, touch and close-in sounds and sights will help a child look or reach. Over time, sights and sounds at greater distances will provide a signal for looking, listening, and/or doing. As needed, distal modes can be connected to proximal ones (e.g., when a child ignores sound from across room, increase it's saliency and, if needed, combine it with gentle touch or playful interference with the child's activity of the moment).

- Increase motor planning and sequencing, including imitation (e.g., from banging a block to putting it on a car to copying sounds).
- Increase sensory processing, including discrimination, by gradually increasing complexity of sensory input as part of the problem-solving interactions (e.g., from simple sounds or words to more complex ones; simple shapes and pictures to more complex ones; and simple motor and spatial challenges, such as obstacle courses, to more complex ones). Use proximal modes (touch, vibration) to support distal modes (sounds, sights) and vice versa. For example, help the child feel and look at a shape. For a child who hears but ignores sounds, see if sound vibration (making sounds on maxillary bone) helps him focus on the sounds.
- Piece islands of experience into patterns by increasing the number and complexity of circles of communication for every interaction.
- Construct patterns with each processing capacity (e.g., motor patterns, spatial patterns, recognition of sounds and words).
- Integrate patterns across all processing areas (e.g., forming a pattern of the sights, sounds, and emotions that make up "Daddy"). Play games that involve looking, listening, doing, vocalizing, and spatial problem solving.
- Begin to form patterns with regard to time (i.e., expectations of what comes next); space (object found in the each room); motor planning and sequencing (e.g., getting a chair to get a toy); and emotional expectations (expectations of fun, such as roughhousing when Dad comes home). Integrate preverbal emotional, sensory, and behavioral patterns of self and others (e.g., piecing together different experiences of "Dad" or "Mom" or "me") through longer and more complex emotional interactions with Dad, Mom, and me.

For most developmental disorders, a child needs to strengthen a number of these processing capacities. Specific therapies to work with these areas are most effective when they occur in semistructured, emotionally based learning situations. As indicated earlier, challenges are learning situations where the child wants to master a problem (e.g., to get to his favorite toy, a child has to get a person to help). Therapies include:

- Physical therapy for motor capacities.
- Sensory-integration occupational therapy for sensory modulation and processing and motor planning.
- Speech for auditory processing, oral-motor capacities, articulation, and preverbal communication.
- Miller Method for visual-spatial processing, motor planning, and areas of cognition.
- Perceptual-motor and visual-spatial approaches for motor planning, perceptual-motor patterns, and visual-spatial problem solving.

Foster the formation and use of meaningful ideas, and build bridges between ideas for logical thinking by creating interactions that enable the child to:

- Invest the act of communicating with pleasure and mastery by using it for fun, getting needs met, and solving solvable problems.
- Apply and use sounds, words, pictures, or other symbols in all aspects of emotionally based problem-solving interactions (e.g., negotiations to meet needs and using words for "Juice!" or "Open door!").
- Engage in pretend play (feeding the doll) and in imaginative dialogues in which

drama is the product of the interactive use of ideas.
- Interact using actions and ideas in all thematic areas (dependency and love as well as assertiveness and curiosity).
- Open and close many symbolic circles (e.g., long, opinion-oriented discussions or debates).
- Extend long chains of symbolic circles into abstract thinking, including negotiating emotional causality ("I am mad because…") and concepts of time ("I want it now!"), space ("Here, not there"), self and non-self ("This is mine!"), and reality/fantasy ("This is only pretend").

Developmentally appropriate practices geared to symbolic elaboration and bridge-building between ideas will foster the ability to think creatively and logically. The processing capacities that support attention, engagement, intentional communication, and problem-solving interactions will also foster thinking skills. The following processing capacities will further enhance thinking and vice versa. Create interactions that help the child to practice:
- Auditory/verbal comprehension (i.e., understanding words and sentences).
- Visual-spatial symbolic elaborations, including understanding the dimensions of space and related quantity concepts (e.g., creative building of a house with different rooms for different activities).
- Multistep problem solving, motor planning and sequencing.
- Verbal and spatial sequences ("if/then" and picture sequences).
- Affect and behavior regulation and modulation.
- The capacity to visualize verbal ideas, verbalize visual images, and visualize action and motor patterns (e.g., treasure hunt games).
- The integration of affect (wish) with emerging concepts of space, time, classification, sequencing, and causality.
- Part/whole relationship thinking, including big-picture thinking (forest for the trees).

The specific interventions that can work with these processing problems are most effective when the interventions are carried out in semistructured, emotionally meaningful learning interactions. These learning situations need to present a challenge where a child has a strong, modulated affect necessitating a need to master the challenge (e.g., a debate over staying up 15 minutes later or playing treasure hunt to find a favorite toy). Specific therapeutic interventions include:
- Speech therapy for auditory processing, articulation, elaborating, verbalizing ideas, and verbal reasoning.
- Sensory integration occupational therapy for motor planning and sequencing and behavior and affect modulation.
- Miller Method for visual-spatial reasoning, related cognitive capacities, verbal reasoning, sequencing, and motor planning (see Miller & Eller-Miller, Chapter 19, this volume).
- Perceptual motor interventions for visual-spatial reasoning, motor planning, and sequencing (see Wachs, Chapters 20; Youssefi & Youssefi, Chapter 21, this volume).
- Mediated learning and instrumental enrichment for visual-spatial reasoning and verbal reasoning and related higher-level concepts (see Chapter 22, Feuerstein, this volume).
- Lindamood-Bell Learning Process (Lindamood & Lindamood, 1998), the Miller Method (Miller & Miller, 1992), and various computer programs for auditory processing, reading, and math

skills (see Lindamood & Lindamood, Chapter 23; Bell, Chapter 25, this volume).

Motor, Sensory, and Preceptual-Motor Activities and Visual-Spatial Activities

This group of activities constitutes the third type of developmentally appropriate interactions that should be part of every child's comprehensive home and school program.

Basic Principles of Activities

These activities are geared to the child's individual differences and regulatory patterns. They build basic processing capacities and provide the support that helps children become engaged, attentive, and regulated during interactions with others. For example, children who are underreactive and have low muscle tone will benefit from proprioceptive activities (e.g., jumping on the trampoline) or vestibular activities (e.g., swinging) to increase arousal, attention, and intentionality. Other children need calming and organizing activities, which build awareness of their bodies in space, require bilateral movements, and reduce tactile defensiveness. Some children try to find their own supportive "solutions," which become evident in such behaviors as constant running and jumping or lying on the floor.

To understand a child's regulatory profile and organize a home program, it is useful to organize specific recommendations from all therapists working with these processing areas. These activities can be used to help a child get ready for Floor Time and semistructured activities, reorganize, and increase arousal or calm down and focus, as well as to strengthen the child's basic processing abilities.

The amount of time children should participate in these activities depends on their individual needs, but usually involves from 3 or more hours of 15- to 20-minute sessions interspersed throughout the day. For children at early developmental levels who need to become more fully engaged and purposeful, these activities may occur very frequently because they are "fun" and increase the children's pleasurable interactions with others. These activities also increase communication because children can be taught to gesture or use picture communication to indicate what they want (e.g., more or less, slower or faster). These activities can also be used for problem-solving interactions and sequencing (e.g., obstacle courses and other motor-planning activities).

At the more advanced developmental levels, the activities may focus on practicing specific abilities, such as visual pursuit and motor planning (e.g., flashlight games, bilateral drawing activities, construction). The activities can also be integrated with symbolic ideation, such as "flying to outer space" on the swing, "steering clear of sharks and pirates" on the platform swing, pretending to be Peter Pan fighting Captain Hook with Nerf swords (eye-hand coordination), going on jungle safaris in search of wild animals, or constructing forts.

At all levels, children may benefit from activities that support processing capacities. These activities may overlap with some of the semistructured activities described previously.

The basic areas of functioning that should be addressed include:

- *Sensory and motor modulation and integration* (e.g., start-stop activities, running and changing direction, red light-green light, jumping on a mattress or trampoline, spinning, swinging, and gentle roughhousing to wrestling, as well as

musical chairs where the music tempo changes from slow to medium to fast).

- *Perceptual-motor challenges* (e.g., looking/doing games and activities involving destinations, such as throwing and catching a ball or reaching for a desired object moving on a string to the left, right, and across the midline; kicking and hitting a big Nerf ball; using the balance beams, playing dodge ball, or flashlight tracking and drawing. Fine motor and grapho-motor activities include pencil and paper mazes, dot-to-dot, copying designs, Legos, Light Brights, cutting and pasting, and painting and coloring).
- *Visual-spatial processing activities* (e.g., treasure hunts, obstacle courses, hide-and-seek, "what's missing?" and games such as Connect Four, Othello, Guess Who, and junior architect games).
- *Tactile discrimination* (e.g., finding objects hidden in different textured materials, such as rice, beans, or bird seed; finger painting in pudding, paints, or shaving cream; or identifying objects and toys hidden in a pillow case [for this activity, add verbal clues or ask for a category]).

For additional information, see Miller & Eller-Miller, Chapter 19, on the Miller Method; Wachs, Chapter 20, on visual-spatial thinking; and Youseffi & Youseffi, Chapter 21, on sensory-motor integration, this volume.

Developmentally Appropriate Interactions with Peers

It is vital for the child to practice her emerging abilities through interactions with peers as well as with caregivers. Play with another child should be started as soon as a child is fully engaged and interactive and is beginning to master, or has mastered, imitation and problem-solving interactions. Parents should provide mediation to encourage engagement and interaction between the children. The best playmates are those who are interactive and verbal and can reach out and encourage, as well as model for, the child with special needs. Play dates should be increased to three to four times a week as soon as possible.

It is also important for all involved to recognize the considerable demands of a developmentally appropriate, home-based program. Other family members and people (e.g., graduate students and volunteers) should be trained in the methods and principles of floor time and be scheduled in to help implement the program.

SEQUENCE OF PROGRESS WITH DEVELOPMENTALLY APPROPRIATE INTERACTIONS AND PRACTICES

Developmentally appropriate interactions (i.e., floor time) guide the work of parents, caregivers, and the therapeutic team. Other members of the team, such as speech and occupational therapists, should follow the principles of floor time so that their work also helps the child mobilize the six developmental levels, as well as helps the child achieve the specific goals of their therapeutic field. The primary goal of developmentally appropriate interactions is to enable children to form a sense of themselves as intentional, interactive individuals and to develop cognitive language and social capacities from this basic sense of intentionality.

Children with autism or other non-progressive disorders of relating and communicating often lack the most basic foundation for interpersonal experiences (that is, they are often not interactive in the purposeful way that ordinary 8-month-olds are). Therefore, much of the experience that they might use to abstract a sense of their own self is not avail-

able to them. Developmentally appropriate interactions and practices based on the Developmental, Individual Differences, Relationship-based (DIR) model mobilizes the child's emerging functional-emotional developmental capacities, which together form a sense of self characterized by the capacities to engage, be purposeful, and think. (See Chapter 4 for further discussion of this model.) Developmentally appropriate interactions are based on the thesis that affective interaction can harness cognitive and emotional growth (Carew, 1980; Feuerstein, Rand, Hoffman, & Miller, 1979; Feuerstein et al., 1981; Greenspan, 1979a & b, 1989, 1997; Klein,Wieder, & Greenspan, 1987).

The earliest therapeutic goal is often geared to the first steps in the developmental progression, that is, to foster focus and concentration (shared attention), engagement with the human world, and two-way intentional communication.

As described earlier, as parents and therapists foster focus and engagement, they must pay attention to the child's regulatory profile. For example, if he is overreactive to sound, talking to him in a normal loud voice may lead him to become more aimless and more withdrawn. If he is overreactive to sights, bright lights and even very animated facial expressions may overwhelm him. On the other hand, if he is underreactive to sensations of sound and visual-spatial input, talking in a strong voice and using animated facial expressions in a well-lit room may help him attend. Similarly, in terms of his receptive language skills, if he is already at the point where he can decode a complex rhythm, making interesting sounds in complex patterns may be helpful. On the other hand, if he can decode only very simple, two-sequence rhythms and sometimes understands a single word here and there, using single words (not as symbolic communication, but as gestural communication) and using simple patterns of sound may help him engage.

Some children remain relatively better focused in motion, such as being swung. Certain movement rhythms may be more effective than others. For some children, fast rhythms, such as one swing per second, may be ideal. For others, slow rhythms, similar to the breathing rate (one swing every 4, 5, or 6 seconds) may be ideal. Different kinds of tactile input, such as firm pressure on the back, arms, or legs, may foster concentration and focus. Large-motor movement and joint compressing (e.g., jumping on the bed or any trampoline-like motion) may also foster attending. Each infant and child is unique.

It is especially difficult to foster a sense of intimacy in children with special needs. In helping a child attend and engage, it is critically important to take advantage of a child's own natural interests. It is most helpful to follow the child's lead and look for opportunities for that visceral sense of pleasure and intimacy that leads a child to want to relate to the human world.

Intimacy is further supported when a person helps a child form simple and then more complex gestural communications. For example, the father of a very withdrawn child was only verbalizing to his child. The therapist suggested that he try simple gestural interactions first. The father gently put his hand on a toy car that his son was exploring, and pointed to a particular part as though to say, "What's that?" But in pointing, the father actually moved the car, so the son felt the car moving in his hands and noticed, without upset, his father's involvement. The son took the car back, but looked at where the father had touched it with his fingers. This more physical, gestural communication seemed to initiate at least a faint circle of communication: The son's interest in the car and the father's pointing to a spot on the car and mov-

ing it a little opened a circle of communication. The son's looking at that particular spot and taking the car back closed a circle of communication. *These opening and closing circles of communication* create a foundation for subsequent communication.

Building on this minimal interaction, the father got another car and started moving it back and forth in imitation of his son's actions. The father moved his car toward his son's car but did not crash into it. The son initially responded by pulling his car out of the way, but then he mimicked his father by moving his car fast toward his father's car. The two had now closed three or four circles in a row and had begun a real interaction.

After gestural interaction becomes complex with, for example, the father hiding his son's car and his son pointing, searching, and vocalizing to find it, the father can foster the movement from gestures to symbols. Since the father and son were using the car for simple and complex gestures, the father started to say "fast," when he moved the car rapidly, and "slow" when he moved it slowly. After four or five repetitions, the boy boomed his car into his father's car and said the word "fast," although he did not pronounce it quite clearly. The father beamed. He was amazed that his son could learn a new word and use it appropriately so quickly.

Although the child quickly learned a symbol in the preceding case, most children require a long, slow process with lots of preliminary work at presymbolic levels. Words and symbols are more easily learned, however, if they are related to the child's actual experiences and built on the child's affective gestures. Words in isolation or as imposed labels have little meaning for the child.

A major challenge to developing intentionality is a child's tendency to perseverate. One child might only open and close a door; another might only bang blocks together. The key is to transform the perseveration into an interaction by using the child's intense motivation to her advantage to get gestural circles of communication opened and closed. For example, a therapist can get "stuck" in the child's way, or have his hands "caught" between the child's blocks, always being gentle and playful as the child tries to move the therapist out of the way (like a cat and mouse game). As gestural interactions occur, behavior becomes purposeful and affective. The therapist should modulate the child's feelings of annoyance and help soothe and comfort as well, though often a child finds "playful obstruction" amusing.

As the child becomes more purposeful, she can imitate gestures and sounds more readily and can copy feeding a doll or kissing a bear. With continuing challenges to be intentional, she copies complex patterns and imitates sounds and words, often gradually beginning to use words and "pretend" on her own.

Another challenge as the child moves toward more representational or symbolic elaboration is to help the child differentiate her experiences. She needs to learn cause-and-effect communication at the level of ideas and to make connections between various representations or ideas. Since most children with pervasive developmental problems have difficulty with receptive language (that is, auditory processing), and some also have difficulty with visual-spatial processing, it is much easier for them to pay attention to their own ideas rather than to the ideas of others. The way a child categorizes her experiences at the level of symbols or representations, however, is through feedback. The parent becomes the representative of what is outside the child and the foundation for reality. The clinician's or parent's ability to enter the child's symbolic world becomes the critical vehicle for fostering emotional differentiation

and higher levels of abstract and logical thinking. For example, during pretend play, when a child ignores the therapist's inquiry about who sits where at the tea party, the therapist must bring the child back to the comment or question until the child closes the symbolic circle. The adult might "play dumb" and bring the child back to the point of confusion. For example, when the child has the puppet biting the head off the cat, the parent might say, "Ouch, you hurt me." Then, if the child looks at the tree outside, the parent might ask, "I see the tree you are looking at, but what about the cat? What about his ouch?" If the child then says, "I'll give another ouch," and bites the cat with the puppet, the child has closed the symbolic circle of communication. If the parent then says, as the child goes back to the tree, "Do you want to talk about the tree or the cat?" and the child says, "Let's look at the tree," the child has closed yet another circle and also created a logical bridge from one set of ideas to another.

As the parent or therapist helps the child create such bridges, always following the child's lead, the child becomes more representationally differentiated. But if the caregiver either lets the child march to his own drummer or remain fragmented, progress may not occur. The caregiver, therefore, must enter the child's symbolic world through the back-and-forth exchange of ideas. This exchange should include debates and opinions, rather than facts, in both pretend play and logical conversations. Interacting with emotionally meaningful symbols becomes the critical vehicle for fostering emotional differentiation and higher levels of abstract and logical thinking. For this reason, relating to the child when he is experiencing strong affects and following is lead is critical. As the child connects his behavior or words to underlying affects, he gives them purpose and meaning.

In contrast, there is often a temptation to script dialogue for the child because it is believed that children with pervasive developmental disorders find it especially difficult to shift from concrete modes of thinking to more abstract ones. That is, they do not easily generalize from one experience to other similar experiences. The child, however, can only learn to abstract and generalize by connecting more and more affectively meaningful experiences to the concepts, words, and behavior she is using. Imaginative play and emotionally meaningful negotiations, not memorized scripts, are the essential building blocks of higher-level social and cognitive abilities.

The stages of therapeutic progress will vary from child to child and are discussed more fully elsewhere (Greenspan, 1992; Greenspan and Wieder, 1997). It is essential, however, for therapists to recognize that a child must first master missing foundation pieces, such as a continuous flow of two-way, gestural communication, before the child can begin negotiating more advanced levels of relating and thinking.

CONCLUSION

This chapter described the three types of developmentally appropriate interactions and practices required by children with special needs. As discussed, children with special needs, because of their processing challenges, require caregivers, therapists, and educators to meet them at their functional developmental level in the context of their individual differences. Understanding their world makes it possible to help them enjoy meaningful relating and communicating.

Parents and families will find some of the developmentally appropriate interactions more natural than others. Some will find engaging easy, whereas others will fight their

own feelings of rejection. Some will foster purposefulness and assertiveness without hesitation, whereas others will wrestle with conflicts over issues of control. Some will support all types of ideas, whereas others will be more comfortable with some themes (e.g., love) than others (e.g., anger). Family challenges can bring parents closer together or lead to conflicts. Many families will benefit from the various types of support and help that are available (see Shanok, Chapter 14, this volume, on family functioning). ■

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13

Educational Guidelines for Preschool Children with Disorders in Relating and Communicating

Serena Wieder, Ph.D., and Barbara Kalmanson, Ph.D.

Educate each child according to his ways. (Proverbs 22:6)

THE CHALLENGE

The challenge to create and implement effective educational programs for preschool children with disorders of relating and communicating is more compelling than ever given the apparent increase in the number of children diagnosed with these disorders in recent years. These disorders include pervasive developmental disorders (PDD), autistic spectrum disorders (ASD), multisystem developmental disorders, and severe regulatory disorders. There is a confusing array of possible educational approaches to use, and selecting the approach that will be most effective is a daunting task. The purpose of these guidelines is to conceptualize a comprehensive model and theory on which to select and build individualized educational programs for preschool children with special needs so that each child develops the best possible foundation for lifelong learning and functioning. The model proposed in this chapter is the DIR model. DIR stands for a child's **D**evelopmental capacities that integrate the most essential cognitive and affective processes; **I**ndividual differences in motor, auditory, visual-spatial, and other sensory processing capacities, and **R**elationships that are part of the child/caregiver and family interaction patterns. (See Chapter 3 for further discussion.)

Education is one of the central components of individual intervention programs, including the DIR model. Services may be provided directly by education personnel in regular and special education schools, in home-based programs, or through some combination of home, school, and related services in the continuum of inclusion services. Because educational services are both mandated and funded by law from birth, they provide essential resources to families. Congress provided the legislation for educational services more than 20 years ago and continues to be the impetus for raising standards and producing outcomes. In this chapter, the current educational law will be reviewed, followed by a presentation of educational guidelines, Individual Education Plan (IEP) models, and case illustrations.

THE LAW

More than 20 years ago, the PL 94.142 mandated that the educational system provide services from birth to all children with disabilities and significant developmental delays. Since then, numerous cases have challenged the law, leading to revised policies

and the eventual passage of amendments to the Individual Disability Education Act (IDEA) of 1997, which set minimum standards for the states to provide educational services to all children from birth through age 21. Under the Medical Disability Act (504), IDEA mandates the provision of services in education to every child from birth to age 3 (Part C), ages 3 to 21 (Part B), and ages 3-9 (Developmental Delay). The law further mandates that service will be at the level necessary for the child to *benefit*. This law defines autism as a disability that excludes emotional disturbance.

The 1997 amendments brought significant changes to the law. The statute became *outcome driven,* in that educational programs must not only provide services but must also demonstrate educational benefits and progress. The statute requires access to the *least restrictive environment*, which means that children with special needs must have access to the general curriculum for academic studies as well as to extracurricular and other school activities. Schools must therefore provide these children with the *supplementary services they need to enter and progress* through the general curriculum. Children must receive the opportunity to benefit from the educational program with the help of related services, supplementary aides, and technology that provide benefits. The *presumption of inclusion* has acquired many meanings, from full to partial inclusion. Congress authorized a continuum of services as long as the child benefits and services are provided in the least restrictive environment. The law also requires that *teachers be appropriately and adequately trained* to teach within the least restrictive environment. In fact, Part D of the law designates state improvement grants for training.

The law also puts increased emphasis on the *family as a member of the IEP team,* with full participation in the decision-making process. This provides parents with the opportunity to include high standards. Parents can also ensure that their child's program is individually suited to her educational needs and that she is not simply being fit into a program. In addition, access to *due process* ensures fairness in dealing with each child's individual needs, with access to records, hearings, and other information. Requiring *educational benefit* to each child establishes a goal of moving the child forward relative to himself without comparison to others. The law defines four areas of benefit: academic, behavioral, developmental, and emotional. Therefore, it is very important that the IEP set goals high enough to ensure that the child will progress (i.e., raising the bar) rather than identifying goals the child has already or has almost achieved (i.e., dumbing down the IEP). Since the burden of proof is on the parent to prove the child is not making progress, it is crucial for parents to have access to information and experts who know their child in order to develop and evaluate appropriate IEP goals.[1]

The 1997 amendments to the IDEA added some very important provisions that are not yet well disseminated. Most important, by mandating a team-based, decision-making process which includes parents, the law has created ways in which parents can identify options for their children that the schools may or may not be offering. This

[1]IDEA also has provisions for discipline and requires the development of functional assessment and Positive Behavioral Intervention and Support Plan (PBIS) for children who are removed from a program 10 or more days for disciplinary reasons. Nondisciplinary evaluations (NDE) can be provided to determine whether a disability exists and to help develop the IEP for the least restrictive environment. But at this time, the functional assessment and PBIS are triggered by disciplinary problems and come too late; that is, after serious problems have occurred rather than preventively. This provision is not usually used for preschoolers.

means that parents can ask to be part of the ongoing team working with their child in the school. The law does not define what specific approaches should be utilized, so schools can offer whatever they like unless families direct them to address their individual goals in the IEP.

Many challenges lie ahead in serving this population, including insufficient numbers of qualified teachers and training programs available to implement state-of-the-art programs and evaluate teaching skills and outcomes. The current law, however, can be used to improve education for children with disorders in relating and communicating. Later sections will present IEP models as a guide to educators and parents.

PAST APPROACHES

Given the important mandates of the IDEA, the field of special education had to quickly develop programs for large numbers of children. Many choices about the structure of programs had to be made, including hours, where to house these programs, which children to group together, the size of classes, student to teacher ratios, which curriculum to use, which related services to offer, and sources of funding. Needless to say, programs and services varied widely. Historically, educational programs began in restrictive, special education schools and slowly moved to special programs in community-based settings, followed by the recent continuum of inclusion services in the least restricted environments; that is, with typical children in local schools.

When preschool education was first mandated, typical preschool-aged children were not receiving public funding and were not attending public school. Consequently, children with special needs were often grouped together without the benefit of typical peer models with whom they could interact and learn. These groups were both categorical; for example, there were classes for children with autism or PDD, or non-categorical classes for children with any kind of disability, including language delay, Down syndrome, cerebral palsy, mental retardation, and autism.

While the private sector began to accept some children with special needs, it was not until recently that public schools began to house Head Start and daycare programs, making typical children available for integration. It was at this point that schools began to develop a continuum of inclusion services. In some cases, a few typical children entered the special education classes—a process known as reverse mainstreaming—whereas in other cases children with special needs entered classes of typical children. The point was to provide opportunities to learn from and interact with typical peers who could reach out and model language and interactive play behaviors for children with special needs. Inclusion efforts also brought a more developmental perspective to early special education. Undoubtedly, the continuum of inclusion services is an important advance for most children with special needs, but it is still in its fledgling state.

THE MISSING GUIDE TO EDUCATION

The field of special education has generally lacked a theory to guide its goals and practice. In many cases, approaches to the education of older children were adapted for younger children, often leading to curricula based on rote learning and splinter skills and using structured approaches in groups. Efforts were made to adapt various curricula to children with special needs, but few special education programs were directed by a unified theory within a developmental perspective. Until recently, children with special

needs were placed in classes with other children with special needs, without the benefit of typical peers.

Emerging approaches began to provide one-on-one instruction following a prescribed course, recognizing specific strengths, such as visual learning, and using visual strategies to help children learn to organize and to function independently. For example, TEACCH (Treatment and Education of Autistic and Related Communication Handicapped Children) emphasized solitary purposeful work, structuring the environment, structuring the tasks, and providing visual strategies to master a series of curriculum-driven tasks (skills) on a one-on-one basis. TEACCH also took a long-term perspective, helping children learn to work independently with the goal being adult independent living. Where possible, children were included with typical peers.

Using operant conditioning reinforcement techniques, ABA (Applied Behavioral Analysis) utilized a behavior modification system of discrete trials that used one-on-one instruction to develop language, cognitive, and social skills. Later, other techniques were added to support generalization and social interactions, including participation in typical preschool settings with aides. Behavioral programs, however, insufficiently considered individual differences and developmentally appropriate practices aimed at achieving functional developmental capacities, putting little emphasis on the child's emotional and higher-level cognitive capacities for abstract thinking. Although they employ various techniques to teach skills, special education and ABA models have not had a unifying developmental theory to guide the broad overall goals and instructional approaches necessary to achieve the basic developmental capacities to learn, including self-regulation, self-initiative, interpersonal reciprocity, and symbolic-abstract thinking. Yet, these are the core deficits of ASD. Few programs address these core deficits directly, measuring them neither at entry or at outcome, but relying on such outcome measures as academic and cognitive scores or school placement, both of which may be defined differently in every school district.

That is not to say that many techniques have not been valuable in helping certain children. The TEACCH program has many strengths, especially its focus on strengthening the child's capacity for planning and sequencing actions, using visual cues, and, when possible, imagery (Schopler, 1997). The TEACCH program, however, needs to be integrated with a broad functional developmental model, as will be described later. A few other examples include the Picture Exchange Communication System (PECS) (Bondy, 1994), discrete trials (Lovaas, 1987), pivotal response interactions (Koegel, 1999; Schreibman, 1996), and augmentative communication approaches, as well as other efforts that cull from these approaches at the preschool level (Rogers, 1996). However, to be truly helpful, the specific techniques used must be based on a child's unique profile and only be a selective part, at a point in time, of a comprehensive functional developmental program.

More often than not, children have been placed in programs utilizing these techniques, and the techniques have become the program for the child, without addressing the full range of developmental capacities the child should be achieving or how individual differences affect the child's learning and functioning. The result is that children are often being put into programs rather than programs being designed for the individual needs of children.

The DIR guidelines that follow define the basic principles and hierarchical goals of an education program and present a comprehensive model program. It is based on the DIR

model of functional developmental capacities described in Chapter 3 of this volume and Greenspan and Wieder (1998).

DIR PRINCIPLES FOR EDUCATIONAL PROGRAMS

The hierarchy of educational goals for children with developmental challenges follow:

1. To improve the child's functional developmental capacities to relate, communicate, and think (not to memorize rote content or splinter skills).
2. To strengthen and integrate underlying processing abilities.
3. To develop the specific cognitive processes that support higher levels of thinking and problem solving (e.g., to become logical and able to abstract as steps one and two are developed).
4. To expand the emotional range of experience to support initiative, intentionality, reciprocity, flexibility, curiosity, organization, cooperative learning, and exploration, first through mediation and then independently.
5. To acquire the specific knowledge and tools necessary for learning academic content (e.g., to read, write, do math, and perform related skills).
6. To expand emotional availability to respond to increasingly complex and independent learning situations.
7. To convey the centrality of affective connections to others and the logic of caring for others that leads to a social, interactive, rule-based society.

Ideally, upon entering school, most children are prepared for step five and have already developed the first four goals that make it possible. Children with developmental challenges, however, need educational programs explicitly designed to establish the first four foundation steps before focusing on content.

The Essential Underlying Premises

The philosophical underpinnings of programs specifically designed for children with developmental challenges follow.

- Affect plays a central role in all learning. The child has to invest affectively. It is affect that will help the child initiate actions, respond to others, generate ideas, find meaning, and symbolize experience.
- Individual differences are the norm, and variations in learning capacities are expected.
- The child has to bring different processing skills across modalities in order to learn.
- Process is more important than content.
- The child must apply his thinking to multiple contexts.
- The child must be challenged to keep reaching toward higher levels of interactions, problem solving, symbolic thinking, and abstraction.
- Relationships and pleasure are essential for learning to be meaningful and progressive.

Specific Features of Educational Programs That Can Carry Out These Goals

- *Children learn best through interaction and active learning processes and materials.* There is general agreement on this as seen in such wide-ranging models from DIR, Feuerstein's Mediated Learning Experience (1997), Klein's MISC program (1996), to TEACCH (Schopler, 1997) and ABA behavioral models (Maurice et al., 1996).
- *Children learn best through affective involvement and emotionally meaningful*

interactions. This view is shared by Feuerstein and Klein but it is *not* incorporated in most behavioral approaches. Programs should ensure that each child is an active, participating learner as evidenced by initiating and maintaining ongoing interactions; for example, by following a child's lead when she identifies what is meaningful to her and expanding on her intentions to support a *continuous flow of interactions.* When a child tends to be aimless or avoidant, specific approaches based on affect cues, playful obstruction, and problem solving will encourage the child to initiate a solution. Strengthening interaction to allow mediation will help a child expand her range and needs. When meaningful connections are not emphasized, a child learns to comply with external demands but lacks the internalization that leads to self-initiation, empathy, and abstract thinking.

- *Children learn best when they utilize multiple processing capacities simultaneously and have different ways to learn.* This is similar to concepts of multiple intelligence that recognize different kinds of intelligence. The question is not how smart is this child, but how is this child smart? The key is to bring different kinds of learning together simultaneously. The more ways different kinds of processing can be brought to bear on the same concept, the better the mastery. This is especially important for children with special needs who are compromised in certain processing areas and therefore have very uneven learning. The more opportunities the child has to use processes simultaneously, the more these pathways organize and develop. Open-ended, semistructured, and structured approaches can be used to support processing.
- *Children should not skip steps in the hierarchy of goals but should go back to foundation pieces*. Thinking builds on each of the steps. It is the memorizing of discrete facts or actions that can remain devoid of thinking, relying on rote memory and splinter skills. To integrate and digest learning, a child must establish or strengthen mastery of each foundation piece before proceeding. A child who is not yet capable of mutual attention and engagement, as seen by avoidant or fleeting behavior, should first learn to engage before attempting to move onto symbolic play, even though he may evidence presymbolic capacities. Symbolic play with toys must move from crashing the cars or feeding the baby to motivated stories with a beginning, middle, and end. Activities such as circle time need to be evaluated for component requirements, and each child should be assessed for his ability to meet them. For example, can the child sustain attention, engage in distal communication, and maintain trunk stability and balance for extended sitting? Similarly, a child should be capable of building bridges between ideas and holding conversations in order to be able to participate in a circle discussion encouraging understanding of motives and abstract thinking.

The educational goals outlined above are based on four interrelated premises essential for their implementation. The first is the understanding of individual differences. The second is the central role affect plays in processing and learning. The third is the importance of process over content. The fourth is the critical role of relationships in learning.

Individual Differences

Education must take into account individual differences in processing information and in regulating attention and engagement, which are the prerequisites for learning (Greenspan & Wieder, 1999). When the ability to process information (i.e., to take in and comprehend what is perceived through various senses and give it meaning) is impeded, it is necessary to create specific interactive experiences in a supportive educational environment to ensure the child's success. For example, a child who has low muscle tone and is usually underaroused needs and may seek continuous central nervous system stimulation to maintain sufficient arousal in the classroom to sustain attention for passive learning tasks or seat work. This child may need to have access to a small trampoline in the hallway, sit on a flotation cushion or large therapy ball instead of a chair, or chew gum in class to sustain arousal and attention. A child who is internally preoccupied with body states or his own thoughts may need his conversational partners to touch him, initiate eye contact, or give a verbal warning to alert him to an imminent interaction; for example, "Hey Joey, I want to ask you something!" as an entry into the interaction.

The Role of Affect

Affect makes the connections that make actions (behavior) and symbols (words and imaginative play) meaningful. The young child does not engage in cognitive processes without the link to emotions, which creates the intent or desire that directs actions, orchestrates problem solving, and develops the ability to think and create new ideas. For example, a child may memorize a song or story but not use words meaningfully until he desires something or objects to something being done to her. Or, a child might line up his cars in a row but not know what to do next to use the car meaningfully until he can connect to his desire to go to some destination with the car. He may then drive his car to the ice-cream store. Affect generates the intentions and ideas, and opens the child to higher levels of analytic and reflective thinking. The process of helping a child learn needs a way to appeal to his emotions, meet him at his developmental level, and consider his individual differences. Providing playful interactions is the vehicle for learning and finding meaning. What is most helpful is what is derived from the child's spontaneous affects.

Process and Content

Process is the "how" of learning, while content is the "what" of learning. Most important is the process. Basic emotional and cognitive processes, as well as capacities for execution (motor planning), must be identified and evaluated in order to establish the hierarchy of educational goals for each child. Emotional processes include intentionality, initiative, reciprocity, curiosity, exploration, desire, pleasure, tolerance for delay, frustration, anger, and other affects that connect symbols and actions. Cognitive processes refer to different types of nonverbal and verbal thinking and organization, including cause and effect, deductive, inductive, inferential, and other abstract reasoning. Depending on the child's individual profile, these processes can be supported through nonverbal (visual-spatial, tactile, kinesthetic) and auditory verbal sequences.

Relationships

Further, education is not random but mediated through relationships and affective interactions with the child. The educator uses her relationship with the child to expand, facilitate, and scaffold upon the different ways the child can learn. It is the educator who follows the child's lead to expand

learning based on what the child initiates, and creates environments or selects experiences within which the child can begin to discover meanings through exploration and problem solving, all of which serve to help the child learn. In essence, every adult interacting with a child is an educator, facilitating the child's comprehension and communication through interactions that expand the child's abilities.

For example, a parent begins to help her child learn to walk only when the child begins to pull to a stand or cruise along the furniture. The reward is the joint pleasure in their interactions and the child's accomplishments.

THE DIR DEVELOPMENTAL PROFILE

The four components just described are part of the comprehensive assessment used to assess each child when concerns are identified. They also are used during the ongoing course of intervention with the child and family. (See Shanok, Chapter 14; Greenspan & Wieder, Chapter 15, this volume) on comprehensive assessment and work with families, as well as the following case examples, which illustrate the use of developmental and sensory profiles.)

Program Principles and Best Practices

For each child, individual goals must be identified that ensure that the child will learn to think, relate, and communicate at different developmental levels. To this end, certain principles and best practices must guide educational programming.

A number of principles are essential for the delivery of appropriate educational services, including:

- *Programs should be designed for children, rather than fitting children into programs.* This means having the flexibility to take into account each child's individual differences in sensory processing and regulation, rather than designing programs for specific categories of disabilities.
- *Programs should be comprehensive, providing a full range of educational services*, including a continuum of inclusion service delivery options and special education, as well as therapeutic services—speech, occupational, physical, vision, music, art, and sensorimotor.
- *Programs should provide teachers trained to work with children with special needs individually,* as well as with typical children in small groups and with parents.
- *Programs should provide teacher training, supervision, and mentoring* as an ongoing developmental process so that teachers are informed about new and effective intervention strategies. Programs should also provide support to teachers' efforts to provide flexible interventions for children, sensitive interventions with parents, inclusion for students, and team coordination.
- *Programs should include peers with whom children with special needs can interact;* that is, role models for communication and play with flexible formation of groups as the child progresses through developmental levels.
- *Programs should be flexible and adaptive to children's needs at all times.* Children may show variability day to day or hour to hour, and programs must be flexible enough to help each child maintain the most alert and responsive state possible. This may mean calming some children down and helping them reorganize when overwhelmed or distressed, or helping other children become more alert and tuned in if underreactive or withdrawn. Programs require flexibility to meet each child's needs at any moment.

- *Programs should include parents in the education process as active participants* interacting with their children. Families may also want counseling, group support, and other avenues of learning and basic support available. For some families, this will require that parents also have access to transportation services for children. Service providers from multiple agencies will need to coordinate their approaches for families to enable them to benefit from interdisciplinary efforts.
- *Programs should not be provided solely on the basis of a diagnosis.* There is a wide range of individual differences among children identified as having ASD or PDD, pragmatic language disorders, multisystem developmental disorders (MSDD), or regulatory disorders. Early identification of challenges is critical, and intervention should be provided as soon as concerns arise, even before diagnosis. Federal law has mandated services to all children demonstrating developmental delay without requiring specific diagnosis. This allows the possibility of providing intensive intervention and makes diagnosis an ongoing process, including how the child responds to intervention, without the risk of diagnosis as a condition for receiving services. When late diagnosis occurs, a child might be deprived of intensive services, which are best when started as early as possible. In fact, two worrisome trends are now apparent. One pushes children into specific behavioral models for autistic children; the other assigns them to noncategorical placements in which children with a wide range of differences receive the same educational program.
- *Programs should embrace the IDEA, revision PL 94-142.*

THE DIR COMPREHENSIVE INTERVENTION MODEL

Whereas other educational models for children with special needs often rely on structure, ritual, and repetition to help the child learn by making the environment and course of day very predictable, the DIR comprehensive model includes individualized educational programming as one of several intervention components. All components are based on the premise that learning is facilitated by interactive relationships. The child becomes intentional and capable of generalizing and abstracting information for future use through the continuous flow of interactions. The affective connections between the adult and child assist the child in making the link between perception and experience, which turns action into learning that can be used again by bringing learning under the child's intentional and functional control. Before focusing on specific educational programs, the DIR model will be described.

The DIR model includes the following components:

- *Home-based, developmentally appropriate interactions and practices*, also known as "floor time." Five levels of interaction may be utilized:
  1. *Spontaneous follow-the-lead floor time.* These sessions encourage the child's initiative and purposeful behavior, deepening engagement, lengthening mutual attention, and developing symbolic capacities through conversations and pretend play. It is recommended that up to 8 sessions a day be devoted to this effort.
  2. *Semistructured problem solving.* These sessions involve setting up problem-solving challenges in order for the child to learn something new. These challenges may be encountered informally

throughout the course of the day when the child desires something or encounters changes in expectations, which trigger the affect to motivate new learning and help the child experience new competencies. Solving problems may require new language, concepts, motor planning or sequencing, and motor skills. Semistructured learning also includes learning the ritualized social interactions and play of early childhood, such as duck-duck-goose, Simon Says, musical chairs, Indian Chief, red light-green light, and others. Other games focus on auditory or visual processing (e.g., Telephone, Treasure Hunt, board games, and books).

3. *Structured teaching strategies,* such as TEACCH, the Miller Method, ABA and other related interventions, may be necessary for children with more severe challenges who need support to sequence daily living skills, learn to imitate, and practice problem-solving strategies. Once a child can imitate, communicate gesturally, and problem solve, dynamic challenges should be utilized for new skills.
4. *Sensorimotor, sensory integration, and visual-spatial activities*. These activities are geared to the child's individual differences and regulatory system. They may initially be used to help children become more regulated, attentive, and engaged, and move onto development of various skills, as guided by occupational, physical, oral-motor, sensorimotor, and visual cognitive therapists (see Table of Contents for related chapters.).
5. *Play dates* with one child or small groups of children who provide good peer models.

The amount of time to devote to each of the home components will vary from child to child and should be carefully planned in consideration of the additional support by extended family members, students, and others who can be trained to implement the program. It is self-evident, however, that there is little, if any, tolerance for children being isolated and not interacting with others to learn.

- *Speech and oral-motor therapy*—three or more individual/group sessions per week, plus a home program.
- *Occupational, physical, sensorimotor, visual-cognitive therapies*—two or more individual/group sessions per week, plus a home program and sensory diet.
- *Biomedical interventions,* including nutrition.
- *Consideration of new technologies designed to improve processing abilities.*
- *Educational programs*—these include the continuum of school (and in some cases home-based) educational programs, as described in the next section.

Implementing Preschool Educational Programs in Inclusion Settings

The term "education" is used here to describe learning in a school setting with other children, both typical and with special needs. It is important for children with special needs to be with children who are communicative and can model social interaction and symbolic play experiences. Educational settings should provide programs for typical and special-needs children in a flexible setting where ratios can be adapted to fit both the individual needs of the child and the learning experiences at hand. With flexible

organization, these ratios will allow children to have one-on-one educator support when needed, as well as any number of typical peers for specific activities when needed. For example, a small school might have three or four preschool groups, with six to eight children in each group. Larger public schools might reorganize into small-school modules to have the same flexibility and may bring in typical children at the preschool level.

The basic experiences to consider for educational programs are described in the next section, followed by suggested guidelines on group size, staff ratios, and settings.

Learning Experiences/Process and Content

All modalities of learning should be available for children, such as centers with visual-spatial problem-solving materials and sensory materials, as well as movement, pictures/books, music, and especially symbolic play and dress-up areas. The environment should invite exploration and have materials out and available to attract and entice children to initiate, discover, and experiment. The environment should also be changed periodically to encourage flexibility, exploration, and problem solving. The environment should have many visible play options the child can encounter and/or observe other children using for play. Children should be encouraged to explore all areas. Even the child who feels secure only with his cars and trucks may find them parked in unexpected places.

Early learning should follow each child's lead, and new avenues should be encouraged indirectly by changing the environment, linking familiar experiences to new ones, and problem solving around desired objects and activities. This will also encourage the use of language and concepts critical for communication of specific needs and desires. Once a child has learned to play with certain materials interactively with an adult, another child should be brought in to play with them. The goal shifts to both children working together on a task, such as completing two puzzles in which the pieces have been jumbled together or repairing the cars that have crashed with the new tool kit.

Materials should relate to developmental levels, with increasing challenges based on each child's abilities. Many children will have uneven abilities and should be able to move ahead in their areas of strength (e.g., visual-spatial, motor planning, symbolic play through gestures that even precede language) while auditory processing improves. Other children will move ahead verbally and start expressing their ideas but will not have strong enough motor planning to use many figures or actions. Some children will be highly sensitive to the level of auditory and visual stimulation in the environment, requiring modifications to their environment to match the sensory level they can handle. The environment should become increasingly complex as they are ready for more varied or intense stimulation.

School activities should also be *developmentally appropriate.* For example, while typical children may enjoy circle time at some point, children with special needs should not be required to join until they can participate actively and with comprehension, supported by augmentation and priming, and in modalities in which they can interact, such as music, cooking, or sensory integration activities. When circle activities are primarily language-based, the child with special needs should be capable of building bridges between ideas expressed verbally in order to be able to participate in discussions. Time spent on ritualized learning, such as the calendar and weather, should wait until the child finds this information meaningful and can personalize it to his experiences.

School Participation

As children progress and are able to benefit from attending school, it is often the case that some will not benefit equally from every activity in the existing program. It is therefore important to design some classroom activities that exercise the child's needs at her developmental level so that she can participate and learn in the group by interacting with good models, whereas other needs can be met through one-on-one learning. As the child progresses, additional activities related to overlapping needs of the individual child and the group can be added. Instead of just considering which classroom activities the child may fit into and pulling the child out of the classroom for individualized learning at other times, or having the child in a home program and attending selected activities in school, more efforts should be made to design activities that allow the child to participate and learn successfully in the group

Ratio, Group Size, Group Membership

Developmental level, individual differences, and the experience/activity all need to be taken into account simultaneously in order to make decisions about school placement. Flexibility to shift ratios, group composition, group size, and membership as needed is essential. Designing an educational program capable of the full range and flexibility of programming is challenging but critical during early intervention. Table 1 lists the kinds of group settings needed for children at different developmental levels.

INDIVIDUALIZED EDUCATIONAL PLAN (IEP) MODELS

The IEP provides the best opportunity for parents, educators, and therapists to identify the specific goals, approaches, and implementation methods for each child. The IEP depends on collaboration and has mandated requirements for joint agreement and timetables for assessment, review, and modifications. The most significant aspect of the IEP now is that parents can use the IEP to indicate their goals and to hold the educational program accountable for meeting all those goals. Traditionally, separate goals were written by teachers and therapists for various developmental areas, such as speech and language, fine and gross motor, social and emotional, and cognitive. Attempts were made not only to specify the goal but to quantify the percentage of times the child met the criterion for each goal. Goals often became so specific or fragmented that it was difficult to see how they related to who the identified child was and his actual functional capacities.

Before presenting model IEPs, it is important to discuss the essential goals of the IEP in evaluating the fidelity of the child's program relative to the IEP.

Does the IEP Benefit the Child?

Various approaches, including variations in style, categories, and specificity may be used to write the child's IEP, and it would not be possible to address all these differences here. Instead, this section provides a checklist to guide the evaluation of the IEP and suggest possible areas for inclusion. As indicated at the beginning of this chapter, it is very important for parents to exercise their rights to be members of the IEP team and to develop goals to ensure high-standard, comprehensive programming that will benefit the child. The IEP will not only determine the specific services provided, but also serve as the measure of outcome.

Key questions to ask when evaluating an IEP follow.

Table 1. Types of Settings Needed for Different Developmental Levels

Developmental Level	Ratio	Group Size	Composition
Until child is consistently engaged and interactive with one adult, 1:1 interaction is necessary to help the child develop mutual attention, reciprocal interaction, and continuous communication.[a]	1:1	N/A	N/A
Once the child is interactive with adults, small-group experiences for sensorimotor experiences can proceed. Typical peer models can encourage imitation and interaction. Child should begin with 1:1 support with one, two, or three typical children.	1:1	4	Inclusive[b]
As child moves from one developmental level to the next, one-on-one support should be provided (e.g., floor time for beginning symbolic play). Once underway, mediation with one other typical child can be added.	1:1	2	Inclusive
Once child is interactive with one other child, group size can be slowly expanded for sensorimotor playground/gym activities and games or center work. Child should first work with one other child on cooperative tasks and then expand.	1:1	4-6	Inclusive
Once child is symbolic and verbal, he may engage in both 1:1 and 2:1 interactive symbolic play sessions. Group composition can now be larger to encourage child to play with different children and themes.	1:2	4-6	Inclusive
When some social skills are in place, the ratio of teacher to child with special needs can be increased to 1:2 in a larger group composition. Children at this level can be grouped with other children with special needs who are more interactive and ahead developmentally. Using flexible groupings, all children can have the experience of being the more and the less advanced player.	1:3	8-10	Inclusive

[a] When more structure is needed, the Miller method, TEACCH, ABA, or other similar approaches for imitation or pivotal response may be utilized to prepare children for learning in groups.

[b] "Inclusive" refers to including typical children to interact with the child with special needs. Group size may vary depending on the activity and includes other teachers and therapists along with the one-on-one teacher. More than one child with special needs can be involved as long as they have individual support. Once the child is participating actively and cooperatively with another child or children, the one-on-one support can be reduced. To prepare the child for success, it is recommended that he be primed for new activities before joining the group.

- *Does the IEP match the amount of time needed to meet the priorities identified for each goal?* It is important to identify priorities for the child and check whether adequate time and intensity will be spent on these goals to really help the child progress. For example, if social interaction is a goal, is sufficient daily time spent on mediated "play dates" at school with another child or with a small group or "circle of friends?" Are social games taught? Are opportunities created for interaction with typical peers during potential activities, such as speech or occupational therapy, drama, cooking, or a reading or game club? If symbolic play is a priority, how much time and in how many ways is this goal implemented? Make a list of the goals and the corresponding time indicated to evaluate how good the match is and what other goals might need to be integrated into or deleted from the priorities at this time. For example, learning the calendar or weather could be incorporated into the schedule of "play dates," and planning activities could relate to the weather rather than to separate activities. This would also make the learning personal and relevant to the child's experience.
- *Does the IEP include goals specific to the child's functional developmental capacities and are they designed to help the child move from one developmental level to another?* (See specific goals for the six functional developmental levels.) For example, does the IEP identify the increasing number of circles of communication (or indicate time spent in a continuous flow of engagement through interactions) under the goal of two-way interactions with gestures and words? Does the IEP indicate the duration of time for a conversation the child should engage in on various topics? Or, does the IEP specify the levels of symbolic play, such as creating ideas to building bridges between ideas, in which a story unfolds with a beginning, a middle, and an end and which expresses an increasing range of emotions?
- *Does the IEP provide developmentally appropriate goals and activities?*
- *Does the IEP provide appropriate and adequate individual therapies, including speech, oral-motor, occupational and physical therapy, and cognitive treatment?* It is important to question any general limits the school system imposes (or only "offers") and to relate the frequency and duration of therapies to the individual priorities and severity of the child's condition. These related services are required as part of a child's educational program and include individual as well as class-based treatment. The frequency and duration of each session should be specified and implementation should be monitored. The plan should also clarify whether administrative paperwork and meetings are part of the time indicated for direct therapy. Parents should seek consultation if it is unclear how much therapy time the child needs.
- *Does the IEP provide augmentative communication support in a timely fashion with appropriate training of teachers and parents* to *help the child use these supports at school and at home?* For example, does the IEP take advantage of voice output devices, computer software (e.g., Boardmaker, Away We Go, Earobics, or Info-Speech), sensory integration equipment, and other technical and environmental support in the classroom to enhance the child's visual and auditory capacities to learn?

- *Does the IEP provide for frequent parent-team meetings to evaluate progress, make modifications, discuss problems, and allow for parent participation in the class when desired, in addition to ongoing observations?* It is important to have flexibility in the program as well as a relationship with the child's team, which includes the parents as ongoing participants. Parents as classroom volunteers can improve the teacher:child ratio, bridge the learning between home and school and school and home, and bring special talents and skills to their child's class, to name just a few benefits.
- *Does the IEP provide home programs, training and guidance, and materials for activities at home?* For example, does it include a sensory diet and how to use sensory integration activities to help a child calm down or become stimulated as needed? Does the sensory diet also include oral-motor exercises to implement during daily eating and toothbrushing routines, or cognitive games, social games, a preliteracy program, or pragmatic speech activities to practice? The child's school program should be complemented by a home program to provide the intensity and interaction needed to optimize benefits.
- *Does the IEP raise the bar?* Parents and the team are responsible for ensuring that the standards or expectations in the child's IEP are relatively high enough to establish advancing goals. It is a good idea for the team to compare the last IEP with the current one and note the changes. The team should check if the identified goals are ones that the child has already achieved or is very close to achieving, as well as verify that the child has demonstrated achievement for any goal that has been checked as having been achieved or given high ratings.

GOALS RELATED TO THE SIX FUNCTIONAL DEVELOPMENTAL LEVELS

Different school systems organize and describe IEP goals in various ways. This section suggests goals for each developmental level that can be incorporated into the child's IEP. These goals are organized with the idea of helping children move from one level to another. In some systems, goals may appear under such major instructional headings as language and communication, cognition, social-emotional, sensory processing, self-regulation, or visual-motor/motor planning. In the following list, they are organized by core functional developmental capacities. Under each heading, specific long- and short-term objectives follow, including quantitative criteria for each goal.

The list reviews goals that can be included under one or another heading used by schools and provides a format for the statement of goals for the IEP. Chapter 3 of this volume includes examples of developmentally appropriate ways to implement these goals. The chapters on communication, occupational and physical therapy, vision, motor planning, and executive functions (neuropsychology) also include specific goals that can be adapted in these areas.

There are several ways to quantify both the amount of time and the expected outcomes for each goal. Although the quantitative criteria for the goals are not specified and would need to be added, goals can be established in terms that:

- *Indicate change in the percentage of response.* For example, for a child who may be closing the circle of communication 30% of the time, the specific goal would be to close circles 50% of the time at the next time interval.
- *Indicate change in the number of responses.* For example, if a child is

opening and closing 20 circles, the next goal would be 50 circles or that the child will respond 3 out of 5 times.
- *Indicate the time interval designated for that goal:* for example, over a 1-week time period or during the next 3 months.
- *Indicate the amount of time to be spent on the goal,* such as 10-minute periods, 8 times a day.
- *Consider the use of the functional emotional assessment scale (FEAS) measures,* which have established reliability and provide specific examples for each level. The FEAS could be scored at pre- and post-intervention intervals.

Other important features to identify for each goal relate to spontaneity, unscripted and without direct prompting (e.g., saying or doing something without the instruction to "say" or "do"), and generalization across contexts and people. These goals may be quantified in terms that:
- *Indicate the context in which the child will demonstrate each developmental capacity,* such as at school, on the playground, or at home.
- *Indicate whether the child will demonstrate the developmental capacity spontaneously* (nonscripted) or with natural prompts, such as questions during interactions.
- *Indicate whether the child will demonstrate the developmental capacity independently.*
- References to adults include parents, teachers, aides, and therapists. As indicated in Box 1, parents are included in both home and school activities as well as during meetings and IEP sessions.

CASE STUDIES OF THREE CHILDREN AND THEIR IEPS

The case studies that follow provide examples of a range of children working on different developmental levels in a variety of educational settings. These studies illustrate how to make decisions about a child's individual needs in the context of his typical day at home, in therapies, and in an educational program. They also represent the three primary contexts in which the DIR comprehensive model is implemented. The IEP goals and objectives are constructed to address the child's individual needs and stretch the child to work toward the next developmental level. The IEPs also illustrate different styles and formats to serve as models for various school programs.

Each child's program has three major components that constitute the DIR comprehensive approach at home, in therapies, and in school-based educational programs. The first component promotes engagement and spontaneous interactions in multiple floor time sessions as well as through interactions throughout the day that encourage relating, communicating, problem solving, symbolic play, and symbolic thinking. The second component provides semistructured problem solving and ritualized social games, as well as structured activities such as the Miller method (see Miller & Eller-Miller, Chapter 19, this volume) TEACCH, behavioral interventions, and augmentative communication when indicated. These activities depend on the child's individual profile and current capacities to think and learn. The third component provides sensory integration and sensorimotor interventions that promote the child's organization and attention to support interactions and learning.

The particular formats for IEPs vary by schools and districts, but the intention to specify goals and objectives is universal. All IEP goals are based on the primary goal of establishing a foundation (structure) for learning based on the core capacities for engagement, two-way communication, and affect.

Box 1. Goals Related to the Six Functional Developmental Levels

I. Shared Attention

- Child will sustain shared attention with a special adult in sensorimotor interactive play using the child's preferred and pleasurable sensory and motor modalities, such as movement, looking, touching, or listening.
- Child will regulate his sensory system in order to sustain shared attention with support.
- Child will regulate his sensory system in order to sustain shared attention independently.
- Child will increase shared attention by increasing the interactive circles of gestural communication, resulting in a continuous flow of interactions between child and adult rather than trying to focus on a particular object or toy.
- Child will sustain shared attention with a peer in interaction.
- Child will sustain shared attention in a group.
- Child will sustain shared attention independently across contexts.

II. Engagement

- Child will form relationships with special adults through pleasurable and enjoyable interactions.
- Child will sustain engagement in reciprocal social interactions with special adults that bring pleasure and joy.
- Child will sustain engagement in reciprocal social interactions when annoyed and protesting.
- Child will increase sustained engagement by increasing the circles of communication.
- Child will increase sustained engagement through a wider range of emotions, such as jealousy or fear.
- Child will sustain engagement with a peer with adult mediation.
- Child will sustain engagement with a peer "expert player."
- Child will sustain engagement within group interactions.

III. Two-Way Purposeful Interactions

- Child will interact in a back-and-forth rhythm in animated exchanges using facial expressions, sounds, and other gestures.
- Child will initiate purposeful interactions around desires (open circles) and will close circles following adult's response to her initiative.
- Child will increase number of purposeful interactions around desires for sensorimotor activities, to go somewhere, to obtain objects, or in response to adult strategies to expand the number of circles; for example, the adult will pose obstacles, play "dumb," or create extra steps to reach desired goal.
- Child will increase number of purposeful interactions using imitation.
- Child will increase number of purposeful interactions using simple gestures, such as reaching, taking, pulling, or pointing.
- Child will increase number of purposeful interactions across widening range of emotions, such as dependency, assertiveness, and jealousy.
- Child will increase purposeful interactions in various processing areas, including visual-spatial, motor planning, perceptual motor, auditory processing, and language.
- Child will sustain purposeful interactions with a peer with adult mediation.
- Child will sustain purposeful interactions with a peer "expert player."
- Child will initiate purposeful interactions with a peer spontaneously.
- Child will sustain purposeful interactions within group interactions.

IV. Complex Problem-Solving Gestures

- Child will express communicative intent through gestures or words to get what he wants.
- Child will sequence (motor plan) in order to execute an idea, such as a desire for a cookie, to pull a chair over to a cabinet, climb up, open cabinet, open container, get cookies and smile at mom.
- Child will sequence (motor plan) in order to execute a desire; for example, in order to play with dad who is reading the paper on the couch, the child will climb up, bounce on dad, and pull him onto the floor to play.

Continued

Box 1. *Continued*

V. Creating Emotional Ideas–Representational Capacity and Elaboration

All the goals at levels V and VI assume that the child is creating ideas while playing interactively and spontaneously with another adult, child, or group. Some children may create ideas but prefer to play alone or act out all the roles themselves. These levels are not fully reached until the child is fully interactive based on previous levels of established shared attention, engagement, and two-way communication.

- Child will initiate the use of realistic ideas in interactive imaginative play, such as by hugging the dolls.
- Child will initiate the use of ideas using realistic verbal interactions.
- Child will express ideas derived from her affect or intent, such as saying "Play outside!" when she wants to go outside.
- Child will express ideas derived from her affect by combining words and reality-based actions, such as sequence pretending to be hurt and going to the doctor to get better.
- Child will engage in conversations to express ideas.
- Child will elaborate on ideas through increasing verbal and symbolic play sequences, such as getting hurt in a crash, going to the doctor, being examined, and going home.
- Child will create imaginary (not reality-based) ideas using magical thinking/powers.
- Child will assume different roles and act as the character in role-play.
- Child will predict how others will feel or act in certain situations.
- Child will respond to other's feelings appropriately.
- Child will demonstrate confidence to resolve conflicts that come up in social situations, such as waiting, trading toys, taking turns, playing together, asserting self to retrieve his toy, joining in, or defending others.
- Child will assume multiple roles and use figures to represent characters.
- Child will expand ideas to include a wide range of themes and feelings.

VI. Building Bridges Between Ideas–Abstract Thinking

- Child will close all symbolic circles in both pretend play and reality-based dialogues.
- Child will respond to "Wh" questions, including who, what, where, when, and why.
- Child will debate, negotiate, and make choices when deciding what to play, what to do, where to go, and who goes first.
- Child will connect ideas in logical ways that make sense (not fragment, change topic, or become tangential).
- Child will integrate concepts of time in ideas.
- Child will integrate concepts of space in ideas.
- Child will integrate concepts of quantity in ideas and problem solving.
- Child will explain reasons for feelings and actions.
- Child will compare and contrast ideas, preferences, and other people's views.
- Child will give opinions, selecting appropriate dimensions for views.
- Child will create dramas with a beginning, middle, and end.
- Child will identify motives of other people or characters' actions and understand different points of view and feelings.
- Child will predict feelings and actions of other characters.
- Child will recognize complex intents, such as deception, sarcasm, and conflict.
- Child will reflect on feelings in both pretend dramas and conversations taking place in reality.
- Child will expand to full range of emotional themes, including conflict, aggression, and morality.
- Child will reach higher levels of abstraction and will be able to see details as well as the big picture (trees and the forest).
- Child will recognize strengths and weaknesses in self and others.

Each case begins with a brief developmental profile. A typical day for each child is then described. A sample IEP follows each description to show how the goals and objectives are constructed and implemented. The sample IEPs include classroom goals and objectives but not the specific objectives of the occupational therapist (OT) or speech and language therapist.

Child 1: Henry

Henry was referred for intervention at 2 years, 9 months of age, after his preschool teachers noted that he was not forming relationships with the adults or children. Henry had already been receiving speech and language therapy 3 times a week for 9 months, because his parents had acted on an early concern about Henry's failure to develop expressive language. Now, at 4½ years old, Henry is a tall, sturdy-looking boy with brown hair and dark eyes, who appears friendly but guarded. Sometimes he gets very excitable, whereas at other times he is more passive. He eats and sleeps well.

Developmental Profile

Shared attention is achieved at all levels. Henry is able to integrate attention across sensory modalities to sustain his attention and activity level in multiple interactions. He can stay with an interactive game on the playground best if most of the cues for transition are visual and with assistance when cues are predominantly auditory. Henry is independent across contexts if he is motivated by the content and the expectations are for less than 20 minutes in a large group. He sustains attention at circle time best when seated in proximity to the teacher, he has previewed the story, or a favorite of his is read to the group, and the expectation for sustained attention is about 20 minutes.

Henry is capable of *engagement* in interactions led by him for periods of time up to an hour or longer, but his staying power for reciprocal engagement is significantly compromised when he has to adjust to an adult or peer taking the lead. Henry can develop an intricate imaginary plot and follow through without significant distraction in a play session with an adult who joins him and promotes his ideas. He is more likely to lose track of the plot or disengage from peer interaction in play when he is required to follow the lead of other children. This is in part due to his difficulties with auditory processing. He is not yet confident in his real social situations about resolving conflicts or negotiating turns. He either becomes overly excited and drifts from the interaction or becomes more passive, waiting for other children to assert themselves.

Two-way purposeful interactions flow smoothly when Henry's interactions with adults deal with pleasure, dependency, curiosity, and other positive emotions. These interactions currently break down when he is engaged in managing the negative range of emotions, such as jealousy, envy, annoyance, and disappointment. Henry will spontaneously initiate interactions with peers or in groups, but not with the regularity or follow through expected at his age. For example, he will greet a child from his class that he meets by chance in town, but he may require an adult to help him notice that the child has seen him. After the greeting, he becomes awkward and dependent on the adult to assist him in taking the next steps to maintain the conversation. On his own, he may withdraw or make a comment that is too adult for the situation. He has little confidence in his ability to negotiate independently with peers in social situations. Henry is most likely to withdraw and mumble to himself if left to his own devices when another child is assertive with him in a game.

Complex problem-solving gestures are frequent and spontaneous but limited by challenges in motor planning and visual-motor coordination. For example, Henry may decide that a character in his fantasy needs a black mask. He can assemble materials for creating the mask—paper, scissors, markers, and tape—but will become dependent on others to draw and cut. He is, however, able to describe the shape of the eyes he wants cut out or the size of the face.

Representational capacities include realistic and imaginary ideas. Henry expresses a wider range of affect through play than in his real life interactions. He will take the role of an angry bad guy but will not easily express anger with strong affect in a real interaction with an adult or peer. He will independently assume the role of one character in play. Abilities to switch roles or predict the feelings or behavior of others are emerging. In pretend play scenarios, Henry's *symbolic capacities* include creating emotional ideas focused on magical powers. He loves to be a wizard, a good witch, or the magical hero from computer games. With adult facilitation, he will try out more than one role and predict the feelings of characters, although his range of themes and emotions is restricted. He tends to focus on feelings of being stuck or trapped and working out escape strategies. He has moved from feeling helplessly trapped and hopeless in a visual-spatially confusing world to seeking alternative strategies for escape using multisensory problem-solving techniques. Henry is beginning to *build bridges between ideas for abstract thinking* in space, time, and quantity. He answers "Wh" questions intermittently and creates dramas with a beginning, middle, and end with adult facilitation. Henry is beginning to use adult facilitation to negotiate with others and to take their ideas into account while generating his own opinions. An adult may suggest that Henry does not like the idea that the pirates set sail, and encourage him to tell the others that he wants the pirates to get stuck in the deep dark cave. With help, Henry can offer the idea and acknowledge his friends' wish to sail across the sea, an activity that could take place after they escape from the cave.

Sensory Developmental Profile

Auditory processing: Henry's *expressive language* is more available and flexible (since he knows what he wants to say) than his receptive abilities, which are affected by a time lag in his processing and difficulties with multipart communications or following multiple sequences given in oral directions. Despite his extensive vocabulary, he has a limited ability to sustain a spontaneous conversation that takes the other persons' communications into account during a back-and-forth exchange. For example, on the playground, his peers may have suggested transforming from Disney characters into Star Wars characters and be off initiating a new scenario on another planet while Henry is still processing the idea and beginning to cope with feelings of being left behind.

Sensory reactivity is a challenging area. Henry is very excitable. He is challenged to maintain an optimal level of arousal to maximize his capacity to sustain focus without becoming overstimulated. His excitement is often seen in motor-overflow activity, such as chewing his shirt or wringing his hands.

Motor planning and visual-motor coordination also are areas of concern. For example, in setting up action figures on a table, Henry is likely to repeatedly knock over most of the setup while adding something new to

it. He is awkward in his tool use and is just beginning to be willing to draw.

Visual-spatial processing, such as memory and comprehension of visual materials, is strong. He has a good memory for everything he sees, and comprehends visual information well. His visual-spatial thinking and organization is less well developed, and figure-ground discrimination is weak. He is apt to try to fill the table space with many more objects than the space can accommodate while losing track of the salient object.

Affective processing: Henry has made rapid and significant progress in his interest in the interpersonal world. He is now highly motivated to relate to others and can sustain interactions with those who are capable of tuning in to him. He is capable of *connecting affects to intentions* in his imaginary play but is less able to recognize the connections in other people's intentions. He will report that the creature is upset and depressed because he is feeling as though he will never find his way out of the dungeon, but he can not adjust his response to another child based on his affective expression. *Problem solving* is an intense area of interest for him.

Rate of Progress

Henry's rate of progress is very promising. Within the past year, he has become highly motivated interpersonally, seeking out peers at school and in his neighborhood. When Henry first began a DIR intervention, he had almost no intentional communication. He had learned vocabulary and some scripted language for making requests, but he had no spontaneous language or flexibility in his use of known words. Henry's sensory reactivity was not yet recognized, and many behaviors were seen as inappropriate and thought to be volitional. Henry had no symbolic play. Now, through the use of floor time sessions and sensory processing-oriented occupational therapy, as well as continued speech and language therapy, Henry has become increasingly spontaneous in his use of language during conversations and more symbolic in his play. His excitability was treated as a sensory issue, and most of the behaviors previously interpreted as inappropriate have been transformed. Henry's parents are very hopeful about their son's progress following DIR intervention. His interactive, communicative, and thinking capacities are so improved that his parents are now considering sending him to a regular preschool.

Current Intervention Program

Henry's current intensive, comprehensive intervention program includes the following:

- Four to six sessions of "floor time" per day.
- Four days per week of 3 hours per day of preschool with typically developing children.
- Three times per week of individual speech and language therapy.
- Two times per week of occupational therapy (OT) with a sensory-processing emphasis.
- Two times per week of family DIR psychotherapy.
- One time per week of therapeutic creative drama class.
- One time per week of art class.

Henry's parents selected a full-inclusion setting because he was able to connect with, and was interested in relating to, the other children and the teachers. His verbal skills had become adequate to communicate with the children. Both parents and service providers expect Henry to make significant advances in his relational and symbolic capacities through his interactions with peers. With the assistance of an aide, he could follow the daily routines of the class and participate in all the activities.

A Typical Day

Henry's day begins with an early morning one-on-one speech and language session focused on encouraging Henry to generate spontaneous language about pictures chosen by the therapist from Henry's favorite books. In this semistructured setting, he is able to acquire skills in verbal description, self-initiated generation of language, and the pragmatic ability to comprehend what information his conversational partner will need in order to sustain reciprocity. After speech, he has a snack with his mother, often purchased from a local store where the clerk is eager to have Henry ask for what he wants, make friendly comments, and pay for his food. This gives Henry a real-life experience utilizing the skills he just practiced at speech, as well as an experience he can use to expand his symbolic play. On other days, he and his Mom might stop for gas or take the bus, always creating opportunities to learn more about how the world works. These experiences are essential for encouraging incidental learning.

Mom and Henry go home to meet his occupational therapist, who spends half her home visit working on fine motor skills, building with blocks and Duplo, and drawing at an easel. In order to use drawing as an activity to also build symbolic thinking, his therapist encourages Henry to draw a picture of his house and family by using the shapes he has been learning. The second half of her time is used for sensory integration activities. Today, they jump on the trampoline the parents bought for the yard and try out taking Henry on roller skates up and down the driveway. These sensory activities prepare Henry's central nervous system to be in the optimal state of arousal and attention for his upcoming day at school. After OT, Henry's Mom extends the fine motor activity by having him grate cheese and peel carrots for their lunch. She has learned from the occupational therapist that chewing crunchy carrots is another avenue for sensory input. This activity also provides opportunities to problem solve and sequence, because Henry must locate all he needs, open different packages or containers, figure out why the cheese is kept in the refrigerator, and decide on what size and how many pieces he wants. These simple tasks provide him with the chance to make choices, give opinions, manipulate objects, use reasoning, and learn in rapid back-and-forth, one-on-one conversation.

After lunch, Mom and Henry have a spontaneous floor time session. Henry announces his intention to play restaurant. This game is a new favorite for Henry and his mother, following a successful experience at a real restaurant. Henry sets the table, but has trouble not overcrowding the table with plates and utensils. Many things fall, and Henry plays the polite waiter who apologizes and returns with pretend clean settings. His mother is the understanding and patient patron. Henry takes Mom's order and begins to show his new-found capacity to use humor to cope with frustration. He turns from being passive to being active by pretending to frustrate his Mom's attempts to order. Each food she orders is no longer available. "I'm afraid we're out of that just now. Please choose something else," he says with a smirk at his cleverness. With Mom's coaching, Henry shifts between the role of waiter and chef. He creates new ideas but stays focused on a long list of foods and the feelings of frustration and disappointment for Mom—two feelings Henry must work on for himself. The play story has a potential beginning, middle, and end, but the ending has to be mediated by his mother because, otherwise, Henry could perseverate indefinitely on the "joke" he has been playing on her. Nonetheless, he was able to anticipate her feelings in the context of the story and begin to speculate on the feelings

of the chef and waiter. His descriptions, however, are still limited and restricted in range and complexity.

Following their playtime, Mom watches as Henry prepares for school by using visual communication strategies (photos of objects on a velcro strip) to identify what has to go in his backpack. Henry beams as he puts the last picture of the item he needs into the attached envelope indicating he put everything in his backpack. This approach has reduced the prompting he needed in the past and has allowed him to become more independent in following a sequence. They then go to school, talking about the ideas he played with or counting the stoplights on the way. The combination of sensory- and relationship-based activities all morning have primed Henry in his body organization and symbolic thinking to make the most of his time with peers.

Henry attends a private, 3-hour, prekindergarten program held in the afternoon with 13 typically developing children about 6 months younger than he is. The class size, with two teachers and an additional aide as well, afford Henry and the other children optimal opportunities for peer connections and adult support. Although he was eligible for a preschool, special-education day class, his parents and intervention team felt that he would benefit most from one-on-one interventions with specialists and typical play opportunities with peers. Henry is a good candidate for full inclusion because he is highly motivated to make friends and has acquired sufficient capacity to sustain interpersonal communication, to organize his body, and to respond to the requests of others.

His preschool was selected carefully for qualities that reflected the developmental, individualized, relationship-based approach to education. The staff at this school embraces a philosophy of adapting to the individual needs of all their students. The curriculum is organized around a mixture of unstructured and semistructured learning opportunities, with play at the heart of the program. Social interactions are available in every form, from nonverbal chase games to sophisticated symbolic play. Important for Henry is the staff's understanding of sensorimotor organization as the cornerstone for attention and self-regulation. Therefore, they do not hesitate to individualize sensory experiences throughout the day for all of the children. Teachers value their relationships with students as an important avenue to learning in all domains. Philosophically, they use their relationships with children directly, not just as facilitators or organizers of the children's day.

The school also includes Henry's parents in their frequent team meetings and encourages participation in various class activities. Because of Henry's identified special needs, the teachers meet with the parents every month and with the whole intervention team four to six times a year as needed.

When they arrive at school, Henry and Mom are met by Janie, his one-on-one aide, who flexibly facilitates his interactions with the children. She uses a brief verbal prompt to mediate his greetings to two boys who are waiting for him at the gate. Henry begins the school day outside and usually digs in the sand and plays chase with two other active boys. Beginning the day with large-motor activity and an opportunity to connect with peers through active, nonverbal play places the least demand on Henry's developmental vulnerabilities and optimizes his social connection to peers from the outset of the day. Henry has learned to sit on the bench with the other children to get ready to go inside. Janie stands about 3 feet behind the bench ready to help out, observing and chatting with the other children, available in case Henry has trouble calming himself enough to sit down,

but not hovering or drawing unnecessary attention to Henry's special needs.

Inside, Henry needs Janie's hand on his shoulders to help him settle down to quieter activities. This small, interpersonal sensory input is sufficient to help Henry adjust to the quieter, indoor setting. He sits on the rug for circle time. When he starts to "wobble"—lose trunk control—Janie puts a heavy sandbag across his legs to help him stabilize. Everyone is aware that wobbling is not volitional, naughty behavior or an attempt to draw the teacher's attention from the group activity but a reflection of Henry's current capacity to sustain trunk control over a period of time. The importance of having sensory integration equipment available for flexible use throughout the day is recognized as a way to help Henry not miss opportunities—in this case, to develop listening skills in a group. Now Henry is able to listen to the story read to the children. From the beginning, he is positioned near the teacher and the book so that he will feel closer to the communication source. His teachers know that Henry is still working on auditory processing of more distal communications and that his proximity to them assists him in processing the meaning of the story and in sustained listening. By inviting Henry to sit near her at the outset, there is no special attention drawn to his disability or a chance of his feeling criticized for his behavior by changing his seat midway through the story. The children are praised for their patience in listening to their friends' ideas about the story before it is Henry's turn to painstakingly generate his comment about a favorite picture.

After story time, the children choose an area for playing. Henry is encouraged by the classroom teacher to choose something other than the computer (always his first choice), and he is able to choose the house-play area. Again, the teacher is casual in her approach to Henry's special needs in front of the other children. She merely reminds him that he used the computer yesterday and she would like all of the children to try different things. With information from Henry's speech therapist about processing time, she waits for him to select an alternative. If he is not able to choose something or gets struck on the computer idea, she knows to make her offer more concrete, perhaps by offering two choices.

Janie becomes a bit more active in helping Henry choose a role, dress up, and comprehend his friends' directions. Henry is able to follow the symbolic thinking of his peers and to generate his own ideas, but he needs Janie to help slow the interpersonal process so that he can digest all that is being said. He also needs mediation to facilitate the motor planning and coordination required in removing his sweatshirt and putting on the dress-up clothes. Janie makes a point of assisting other children with ties or buckles as well so that everyone has an experience of her as the adult available to help. The school's approach is to assume that all children have individual special needs and that these can be accommodated or adapted to throughout the day.

Henry assumes the role of "Dad" and gets the tie and briefcase, but he doesn't know where to go to leave for work or how fast the day can go by so he can return home. Janie helps him stay in the game by coaching him through many phone calls to his "wife" from his office at work. This game helps Henry develop motor, communication, and symbolic thinking capacities. Janie takes advantage of the game to develop all the children's capacities for symbolic thought and linking feelings to actions. She asks them all why the "baby" is crying when Dad leaves for work. Then she asks them how they can reassure "baby." How could Dad stay in contact with his wife even when he is far away at work? What is it like for Dad not to be home when everyone else is

home? During cleanup, Henry does not know where to put items, and the things he hangs up fall off the hooks. He becomes frustrated and starts to make funny noises, but Janie steps in and actively helps Henry find out from children where things go and ask friends to "hook" things for him. She coaches him but does not take over, preserving his sense of competence by helping him use his relationships with his peers for assistance.

Next, Henry is the pouring helper at snack. He asks each child at his table if he or she wants water, waits for an answer, and pours water into a cup for each one of them. This is a special job that is rotated among the children. It is a semistructured way to practice both communication and motor skills. It encourages the children to remain active and participate in grown-up tasks rather than to make them passive snack recipients, which encourages withdrawal. Henry is so excited he wrings his hands and bounces in his seat. Janie substitutes a therapy ball for his chair, and two other children request and receive balls, too. This is another example of flexibly attending to the children's sensory needs to support development in other domains. Henry cannot organize himself to eat, but he drinks water and bounces on his ball as he tries to interact with the others. He does say a few things to other children, frequently prompted by Janie. For example, Janie might say, "Henry, did you hear Max? He wants to ask you a question." (This alerts Henry that a question, which calls for a contingent response, is coming his way. He sits up and looks toward Max, giving the nonverbal cue of readiness.) Janie has learned to support Henry in learning communication skills whenever opportunities arise in the natural course of the day.

The children go outside briefly after snack, and Henry engages in a pretend game of pirates, mostly involving a chase after he steals the golden treasure. However, after a couple of hours at school, Henry's outside chase games have the added symbolic meaning connected with the story that unfolds about the pirates. His practice and comfort with school enable him to play at a higher symbolic level. On his way inside, he and Jake are given smocks and assigned to the cooking table. Henry and Jake have a two-way conversation about cooking pudding and speculate about whether they will be able to fingerpaint with it once it is prepared. Henry stumbles in front of Jake while trying to pull out his chair and sit down and nearly knocks Jake over. Henry apologizes for being so rude, and Janie softens it by suggesting Henry had no intention to fall on Jake, which Jake accepts. Inevitably, Henry's visual-motor issues create awkward moments for him, but Janie tries to intervene in ways that prevent other children from misinterpreting Henry's intentions.

Two girls and the teacher join the boys, now seated, and they all listen to directions, which are numbered with accompanying pictures. The teacher explains the four-part cooking sequence with illustrations, returns to showing picture 1, and asks the children what to do first. She knows that Henry will be better able to sequence events if they are presented visually as well as auditorily. She also recognizes the benefit of the visuals for all the children. Henry blurts out the answer, not waiting to be called on. The teacher appreciates the answer and announces which child will go next. Henry chews on his lower lip in an effort to control the impulse to say the answer when it is no longer his turn. Once the pudding is made, the children are invited to ask a friend to taste and fingerpaint with them. Henry chooses a very shy girl, who he hopes will allow him to eat the most and control their paper. The activity is a success and Henry has a sustained two-way conversation

with Amy while painting. He is confused during clean-up because the sequence of events is unclear and there are no picture directions. (Janie makes a mental note about how a picture sequence for clean-up procedures will help Henry, and she draws the contrast to the cooking project in her conversation with the teacher after school.) Janie steps in and reviews the first thing to do, providing each next step as the prior is accomplished.

Singing songs in a group before the children say goodbye for the day goes well because the teacher, seeing that several children are aroused, has them stand and dance instead of sitting in a circle. Again, she makes a flexible adaptation to the curriculum based on the children's sensorimotor needs. For the last song, she has them hold hands in a circle and come closer and spread apart, giving them a concrete experience of themselves as an emotionally connected group before departing. Henry forgets to stop at his cubby on his way out the door so Janie asks if there is anything he is leaving at school that he might want. (She is carefully cueing him at a level that supports his own thinking and problem solving rather than doing it for him.) Henry returns and retrieves his sweatshirt and snack bag and walks to the gate where Mom is waiting. Mom offers a big hug and begins with an open-ended question about the day. When there is no response, she wonders aloud if that is chocolate on his chin, which prompts Henry to tell about the pudding. Today he will not have a friend come over after school, but he usually has three or four play dates each week.

Henry has a playtime with Dad when he arrives home from work. Their play evolves from Henry's enthusiastic greeting of Dad. He jumps up on him, and Dad circles them around slowly, then faster. Henry calls Dad "motorboat" and Dad leaves his briefcase in the hall and says he has to start up the motor by pulling the starter rope. He loosens his tie and enlists Henry to start the motor by pulling his tie off. After a few moments of moving through the house making motor noises, they pull up to the bank in the playroom and have an adventure walk through the dark forest. Dad points out the stuffed animals as if they were real and they either hide, move away carefully, or come to pet them, depending on Henry's idea.

Dad takes Henry's lead as the journey unfolds, then offers ideas related to Henry's to help him expand, though only a few ideas are picked up by Henry. Dad encourages Henry to talk about how they feel encountering the different beasts, and Henry responds mostly with fear, which allows them to solve the problem of how to avoid being eaten by the animals. Dad encourages multiple solutions. Like his play with Mom, the theme has a beginning and a repetitive middle. If it were not for Dad, the trip home on the boat would have been forgotten as a logical end. In this context, Henry can connect emotion to intention and create emotional ideas, but the sequential nature of the story is lost in repetitions. Henry still needs to be in command of the mission with assistant Dad at his side as they anticipate what will happen next and join forces. The strength of their relationship helps Henry forge ahead into new territory as he begins to build bridges between his ideas. At the family dinner that follows, they describe their adventure and talk about their problems and feelings, as well as their victories. Then Henry has a bath, and a story read with Dad. High-interest stories with sufficient pictures are selected to encourage discussion of the ideas and problems, predicting what will happen, picturing the next scene, and reflecting on feelings. Then Henry has a kiss and cuddle with Mom before going to sleep. Even Henry's family time is kept within a familiar routine, especially as he transitions

to bedtime, a time of day that requires him to calm himself and fall asleep.

Indications of Progress

Box 2 describes Henry's IEP. By following this plan, Henry achieved all of his goals during the school year, although he still needs adult mediation to manage problem solving with peers when strong emotions of disappointment or jealousy are present. He is sometimes so immersed in his fantasy world of symbolic play that he often needs an adult reminder to shift attention to a mundane task at hand. For example, he may go to his room to dress for school and be found by his mother enacting a scenario in which his sock is a sword. But this time, he is wondering whether to be the good guy or the bad guy. Henry also enjoys conversations with adults and peers. He is curious and is asking more questions to better understand his environment and how others feel. He is helpful and kind toward peers, which makes him well liked even if he is occasionally slow to follow a friend's idea or process the communication to shift attention to another topic. Henry is generally organized in his body and able to modulate excitement.

Case 2: Denny

Denny has just turned age 3 and is beginning to attend a preschool special-day class in the public school setting. Denny's parents suspected developmental issues for some time before his pediatrician referred the family for a comprehensive assessment. When Denny was about 2½ years old, he was formally assessed at a Child Development Center and was diagnosed with an ASD. He

Box 2. Henry's Individual Education Plan

All goals listed below include a foundation of engagement, continuous two-way communication, and affect-based cued interactions to achieve the specific goals that follow.

INSTRUCTIONAL AREA: Communication

- *Annual Goal* (a goal that can reasonably be expected to be accomplished within one school year, 9/99-6/2000)*:* Henry will expand his functional use of language.

  1. Given a structured group setting, Henry will initiate social greetings and phrases to adults and peers four times a day over a one-week period as measured by a teacher observation log:
     a. with mediated verbal prompts
     b. with nonverbal gestural prompts
     c. independently without prompts

  2. Given an unstructured play setting in a group, Henry will express wants and needs verbally with peers two times a day over a one-week period as measured by an observation log completed by the teacher and the speech/language therapist:
     a. with mediated verbal prompts
     b. with mediated nonverbal prompts
     c. independently without prompts

  3. In an unstructured play activity of Henry's preference, Henry will sustain an interaction using verbal/nonverbal communication with a peer for 15 minutes, demonstrating comprehension of his play partners' informational needs:
     a. with adult mediation
     b. independently

Continued

Box 2. *Continued*

4. Given an unstructured play activity, Henry will verbalize ideas for actions/activities three times a day during a one-week period, as measured by a teacher observation log:
    a. given adult choices and prompts
    b. independently

5. During daily classroom activities, Henry will request help/assistance from appropriate staff when needed.
    a. with adult mediation
    b. independently

INSTRUCTIONAL AREA: Sensory Processing and Self-Regulation

- *Annual Goal:* Henry will improve sensory processing and regulation needed for learning and social interaction.

1. Henry will transition from active to more quiet classroom activities appropriately (without excessive vocalizations or physical activity) two times a day over a one-week time period as measured by teacher/observation log:
    a. with adult-mediated prompts (verbal, pictures, modeling)
    b. independently

2. Given appropriate activities/equipment, Henry will elicit staff aid to control/modulate level of emotional arousal (under stressful and/or exciting situations) as needed two times in a one-week period as measured by teacher/occupational therapist observation log:
    a. with adult prompts
    b. independently

3. Given novel movement and sensory activities outside of daily routine, Henry will choose to participate in such activities with adult support for a 15-minute time period.

INSTRUCTIONAL AREA: Motor Planning/Visual Motor Coordination

- *Annual Goal:* Henry will improve motor planning skills required for learning and play activities at his age level.

1. Given novel 3- to 5-step movement activities (games, obstacle course, dress-up, set table) within peer activities, Henry will successfully complete the activities three out of five trials as measured by the occupational therapist and teachers:
    a. with adult assistance
    b. independently

2. Henry will successfully and independently complete the following daily-living classroom activities:
    a. hanging coat and backpack on pegs
    b. put away three out of five toys in proper location
    c. lay out lunch supplies
    d. serve other children snack/drinks
    e. sit with the group in circle and outside
    f. wait in line to enter/exit the classroom

3. Henry will enact ideas in play that contain a beginning, a middle, and an ending once a day for a one-week period:
    a. with adult mediation
    b. independently, *with peer interaction*

Continued

Box 2. *Continued*

4. Henry will use at least one of the following tools at school daily for 5 minutes: markers, paintbrush, fork, pencil, crayon, toothbrush:
    a. with adult mediation
    b. independently
    c. by voluntary choice

INSTRUCTIONAL AREA: Cognition

- *Annual Goal:* Henry will improve abstract thinking skills within play and dialogue.

1. Henry will talk about feelings three times within a one-week period within a dialogue with adult giving mediation in situations involving the following emotions:
    a. disappointment
    b. jealousy
    c. fear
    d. joy/surprise
    e. aggression

2. Henry will answer simple "why" questions within high-affect situations in three out of five trials, as measured by staff in a one-week period:
    a. given adult mediation, pictures, gestures as needed
    b. independently

3. Given a problem involving an emotion of disappointment, jealousy, or fear within a preferred pretend play activity, Henry will find an alternative outcome to resolve the problem in three out of five trials over a one-week period with adult assistance.

4. Given a problem in the classroom with peers involving a high-affect level of disappointment, jealousy, or fear, Henry will attempt to resolve the problem using adult assistance in three out of five naturally occurring situations over a one-month period as noted in teacher/staff observation log.

5. Henry will expand use of emotional themes within his preferred play activities (disappointment, fear, anger, sadness, joy, surprise, jealousy, aggression) to include use of each of the above emotions at least once during a month-long period. Criterion for expansion is use of at least five circles of communication around each emotional theme:
    a. with adult facilitation or suggestion during play
    b. independently during play

6. Henry will anticipate the feelings and behavior of peers in pretend play, linking feelings to actions, using adult assistance, once a day in naturally occurring settings:
    a. with adult suggestion/mediation
    b. with nonverbal adult cue

7. Henry will expand understanding of concepts of time in pretend play activities by demonstrating logical/appropriate sequence of events as well as delays in each of five teacher-determined play activities. Examples follow:
    a. going to school, waiting for bus, time delay before reaching school, arrival
    b. parents coming home from work
    c. ordering, paying, and waiting for food at a fast-food restaurant
    d. waiting to use the bathroom
    e. going to a playground, waiting to use the swing or other play equipment

began to receive DIR psychotherapy with a private therapist and was referred to the school district for the special education services that were about to start. The psychotherapist helped the family immediately assemble an intervention team to begin an intervention the family could manage. Despite multiple studies and interventions, Denny continues to have a serious sleep disorder that has affected his developmental progress and his family's functioning. Both parents are well-educated professionals with full-time employment. His mother, who is self-employed, has had a hard time sustaining her professional practice due to the many nights of lost sleep combined with all of Denny's appointments. His father has used all his sick leave, and his employer graciously allowed his colleagues to donate their sick leave time to him. The family is exhausted.

Developmental Levels

Shared attention is reliably achieved with a special adult in sensorimotor play using movement, visual stimulation, and touch. He enjoys swinging, sitting in a parent's lap, bouncing or riding on Dad's back, and holding hands and jumping on the trampoline. Once Denny makes the connection and is sufficiently aroused, he will sustain shared attention for quieter activities for up to 10 minutes, using visual and sensory stimulation such as simple puzzles or computer games.

Engagement is sustained with preferred adults in pleasurable and protest interactions involving emotions of joy, fear, anger, or frustration. Denny can spend 30 minutes on the swing playing stop-and-go with a parent. He will work at insisting upon finding and securing a particular cereal he wants that he knows is "hidden" in his parents' closet. He seeks physical comfort from a parent when afraid; for example, if they encounter a large dog on the street, he will lead his parents and gesture to get away from the animal.

Two-way purposeful interactions can occur when Denny is not overtired or overwhelmed and if the interaction involves strong personal desires, uses photographs or pictures, gestures, and facial expressions, and takes place with a preferred adult. Denny will exchange photos or bring adults to objects he desires and gesture back and forth to find the object, put it where he wants it, open it, and arrange it for use.

Complex gestural problem solving is an area of strength for Denny. He expresses communicative intent nonverbally; for example, he will find Dad's jacket and car keys, pull Dad to the car, and gesture with the key to unlock it. He understands and sequences actions he can learn visually. Denny will pull a chair to the kitchen counter, climb up, open the correct cupboard to find noodle soup, accurately make his selection, prepare the package for the microwave, program the microwave, cook the soup, wait for the timer, prepare a bowl and spoon, pour, and eat. Denny uses his visual strengths to achieve his desires.

Representational capacity is present in Denny's use of picture symbols to communicate. He is able to represent sequences in picture, but does not yet represent in play.

Sensory/Developmental Profile

Auditory processing is difficult for Denny but impossible to test accurately. Because it is so hard to get consistent responses, developmental baselines have not been established. Denny is nonverbal. His hearing acuity tests as normal, though he has an early history of ear infections and a successful placement of tubes in early toddlerhood. At times, Denny shows almost no response to verbal input, but he will respond quickly to the same request made visually with photos or pictures.

Sensory reactivity is extremely uneven. Denny has many sensory sensitivities to

auditory, tactile, and visual input. His responses are irregular; sometimes he appears hypersensitive and withdraws by running away from noise or jumping excitedly at loud music. At other times, he seems to crave sensation, especially by jumping and rocking. He has extraordinary balance skills and uses no judgment about safety in attempting death-defying feats of balance that amaze and frighten his caregivers, such as climbing to high, precarious ledges or balancing on one foot from a high bar intended to be grasped by the hand. He has little safety or social judgment in general and must be supervised around the clock. (He has thrown himself through windows.) Total supervision is a challenge because, despite multiple studies and interventions, Denny continues to have significant sleep issues—he is awake for extended periods of time throughout the night. Eating is also a challenge with Denny because he only eats about four foods. Remarkably, Denny is successfully toilet trained. He watched his two older brothers and he was "taught" by them.

Visual-spatial processing is a strength. Denny knows and remembers locations of objects and important peoples' homes or offices. Visual gross motor skills are remarkable, while fine motor skills are very uneven. He can use the computer but resists using a fork or marker. In combination with proprioceptive and vestibular stimulation, he knows how to judge distance and depth in balance and climbing.

Communication is best when it is primarily visually based with gesture and photographs. Denny seems to lack the ability to sequence oral-motor movements to articulate intelligible words. Occasional words such as "dog" or "Mom" are heard, then seem to disappear. He has learned a few signs to indicate desires but does not attend to signs as well as to pictures. His ability to sign is unlikely to become elaborated because of motor-planning challenges. Because his wishes are still instrumental and concrete, there are few requests he cannot make understood. Denny's receptive language for familiar ritualized communications is good, but much of his comprehension is dependent on routine and visual cues.

Rate of progress in Denny's overall development is disappointing and worrisome to his parents. They had hoped that he would be more verbal by age 3 and had not anticipated Denny's oral-motor difficulties. Because he is such a daredevil, they had assumed his motor system was a developmental strength. It is difficult to determine the extent to which his progress is impeded by his serious sleep disorder and other regulatory issues. Despite multiple environmental and medical interventions, Denny continues to have difficulties both falling asleep and remaining asleep through the night. The long, wakeful periods in the night are stressful for the whole family and have affected everyone's ability to be attentive and engaged throughout the day. Denny's parents expected to resolve the sleep issue by his third birthday.

Embracing the DIR model was essential in restoring their hopes and expectations, recognizing how important it is for Denny to learn within relationships as well as in semistructured approaches. Denny's school program adds a semistructured approach to teaching and helps Denny develop a regular routine. A more organized routine during the day may aid the development of regular sleep/wake cycles. In the following example, the teacher uses sensory activities to extend attention and focus by alternating large-movement activity with seated activity and by incorporating sensory stimulation into the seated learning sessions.

Current Intervention Program

Intervention consists of the following:

- Four to six floor time sessions per day at home, with either a parent or the child-care provider, supplemented with extensive physical activity recommended by the occupational therapist .
- Three hours a week of speech and language therapy (including oral-motor therapy) in the home.
- Implementation of augmentative communication approaches at home.
- One hour a week of occupational therapy with a sensory-processing emphasis.
- One hour a week of DIR family psychotherapy.
- Denny is currently placed in a special education preschool 5 days a week, 4 hours per day, through the school district. He receives speech therapy in class and OT at the school site. Children from the typical kindergarten are brought in to interact with the children.
- Two to three play dates a week.

A Typical Day

It is hard to say when Denny's day begins. He is frequently awake with a parent between 2 a.m. and 5 a.m., finally falling back asleep so that he cannot be awakened for a school bus that arrives at 7:45 a.m. or for school that begins at 8:20 a.m. In the early hours, Denny's parents try activities that might put him back to sleep, such as looking at books, massage suggested by the occupational therapist, or singing. When these fail, one parent may rise with him and use the quiet time in the house for floor time play. Today, Dad takes Denny down two flights of stairs to play so that the others will not be awakened. They jump on the trampoline and sing along with his favorite tapes.

Dad chases Denny around the doorways and through the rooms, creating a hide-and-seek chase game that has social anticipation and a moment of surprise. These games foster shared attention and engagement. Denny indicates hunger by pulling Dad to the pantry and looking up at the top shelf where his favorite cereal is kept out of reach so that he will need to interact with an adult to have some. Dad extends the circles of communication between them by playing dumb using facial expression and gesture, but Denny goes to the picture board and brings Dad the picture of the cereal box he wants. Dad continues to extend the interaction by finding out if Denny wants one or two bowls, or a red or blue bowl, by holding out choices and allowing Denny to use gesture to state preference, which he does.

After eating, Dad tries once again to go back to sleep with Denny and is successful, snuggling on a futon bed in the playroom. One parent typically rises with the two older brothers and gets them to school while the other sleeps with Denny and eventually gets him ready and to school by car. Denny is always late to his new class, where the teacher is very empathic with the sleep problem. The classroom is located in a public elementary school across town. Denny's parents selected this class because the teacher has a strong background in sensorimotor integration, is committed to a developmentally based curriculum, and uses play as a primary mode for young children to learn. The room is set up with round tables for selected activities, area rugs for motor play, individual tutoring booths for structured learning, and a house-play area with big pillows for resting. The school district has already placed eight children in the class, which the teacher feels is too many. She has three assistants, which she feels is necessary. Given the level of the children's development and their unpredictability, she feels the rule should be one adult for each child.

Some days Denny goes back to sleep on the pillows and will not be roused. Most days he arrives in time for music, an activity of motion and songs specially selected for Denny and two classmates. Pictures are used to give Denny a choice about which songs to play. The goal is to create an optimal level of arousal with the music and movement to encourage Denny to vocalize. The same music is repeated frequently and, when it becomes familiar, he does hum along with perfect pitch. The speech-and-language therapist who joins Denny for this activity stays at his eye level and exaggeratedly enunciates the words for him. Today, Denny requests the "wheels on the bus" by giving the school bus photo to the therapist and saying "bu." Because his providers want him to understand the agency and power of his communication, no one praises him for speaking. Rather, they just begin the song as a contingent interaction. The therapist quickly takes out photos to symbolize each verse, and Denny chooses which comes next at the end of each verse. Because he laughs and smiles at the babies on the bus saying "waa,waa,waa," the therapist repeats this verse and pauses for Denny to make the "waa" sound, which he does, to everyone's delight. The therapist repeats the verse because he senses Denny's pleasure and caught the gleam in his eye; he is using the pictures and music to capitalize on any indications that Denny is affectively connected to him and to the activity.

Following music, Denny's teacher takes him by the hand and leads him to the tutoring cubicle. Quiet, focused activities are alternated with active events to optimize Denny's state of readiness and cooperation. Even during these seated one-on-one tasks, the teacher rubs Denny's palms, compresses his elbow joints, and blows on his hair. These sensory experiences help Denny maintain attention to tasks of the teacher's choosing. The teacher follows a modified TEACCH curriculum and works with Denny to add the element of social interaction and interpersonal communication to the tasks. In a few minutes, Denny completes puzzles, a prewriting task, a sorting task, and a matching task. To sustain his interest in the matching task, the teacher adds number cookies for oral stimulation, reinforcement, and to gratify his current interest in numbers.

During recess, the teacher has arranged for each child in her class to be met at the door by a special friend, preidentified from the regular kindergarten class. Although her class is the only preschool on the site, she has created special peer friends from the kindergarten by having those children choose someone in her class they want to know. Denny is a great climber and balances in high places, which drew a daredevil boy to become his playmate. His friend has good judgment about safety and knows the playground rules well. He shakes his head vehemently "no" when Denny heads for a forbidden wall and pulls him to the balance beams. The classroom aides are watching and praising Denny and his buddy for knowing where to go. The kindergarten children cannot be counted on to stick with the avoidant children or to always show the best judgment, so the teacher makes sure all the assistants are watching and are nearby during recess. She gives them breaks during the structured class times when she can watch more children herself and ensure their safety.

After recess, two kindergarten children join Denny and another girl for an integrated play group. Since the preschoolers are still developmentally young and nonverbal, the teacher plans an activity that is sensory, motor-based, and fun for all. First, they stir and knead dough for bread. Then they build tents with chairs and sheets and find each other hiding beneath. The preschoolers walk their friends to the kindergarten class with

an aide, stopping to look at, and name, pictures of the children up on the hall bulletin board. On the way to class, they take a bathroom break.

Back in class Denny and two others make a circle, holding hands with the teacher as they sit on the rug. Denny bolts away, running up and down the length of the room screaming and flapping his hands wildly. The teacher receives him in her arms and checks him to be sure he isn't hurt, then tries to seat him next to her, but he bolts again. She asks an aide who just returned with a child from the bathroom to take Denny to the trampoline and then bring him back to the circle. Denny jumps and the aide counts to 20—a familiar routine—then he jumps into her arms, and she sits him at circle between her legs, but only for a moment because someone else now needs to jump. The teacher uses the trampoline when she sees that the children are seeking sensory stimulation from running or jumping. This way, she addresses their sensory needs without having the running, screaming child disrupt or distract everyone in the room. After long discussions with the principal and support from all the parents, the administration agreed to allow her a small trampoline in an adjoining room that also houses a copier, a refrigerator, and other school equipment.

The teacher is trying to engage the children in identifying body parts by putting stickers and bean bags on them and having them remove the items. She sees that Denny and another child are becoming fussy, so she abandons the project and brings out a snack. This teacher has learned that when she is not engaging the children in a game, she needs to rethink its presentation. For example, do they need more preparation, should it be a one-on-one game first, is it visual enough, does it meet sensory needs, or was it presented at an inappropriate time of day? She does not try to make the children complete the task if everyone is frustrated. Rather, she waits for a better time.

At snack, each child has favorite foods placed in several types of see-through containers they are learning to manipulate, including plastic zipper bags and lidded plastic or glass containers. Denny requests his food by giving a photo of that food to the teacher. She gives him the appropriate container, and he works on the fine motor skill involved in getting to the treat. The treats and containers are individualized for each child's needs, both fine motor and oral-motor. All the children are engaged now, and she works with them, as do the aides, in saying the name of the food, signing for more, or requesting a taste from a friend, as is appropriate for each child. Every activity is multisensory and has multiple objectives. Even snack time is a fine motor, oral-motor, social, and communication event.

After snack, Denny is led by the hand with another child to a corner with pillows for a modified circle time. The teacher arranges typical circle time activities for one adult with two children. These children are stretching to sustain relatedness and availability to learn in interaction with one or two people. They are not developmentally ready for a large-group activity, though in a small group they can prepare for the types of activities that usually take place during circle time. They look outside to see the weather and put a photo on a bulletin board that most closely matches the day. Today is gray and sunless. Then they each take a photo of themselves and take turns placing it in the window of a big drawing of a school bus. Some of the other children's photos are already in place because they had circle time earlier, so the aide names the other children and points to them in the room. Now Denny chooses a book, and each child sits beside the aide while she points to pictures and talks about

the story in simple language. At the end of the story, she gives each child some different things to smell—a flower, coffee beans, spices, or lotion on their arms—then shows them their faces in the mirror and points to her nose. "We smell with our nose," she is saying. They each do some smelling, and she shows them their noses in the mirror. When circle time is over, the teacher lights a candle and the children blow it out, a ritual that marks the end of circle time as well as practices blowing for oral-motor development.

Denny is taken to OT by the aide. The occupational therapist works in a carpeted room set up as a gym. Today, Denny is joined by his special friend from kindergarten, whom they pick up on the way. The aide says she'll be back in a few minutes with Sam. The occupational therapist works on motor imitation by having the friend copy every move Denny makes. Then she gives the friend a toy that makes a "pop" and has him do it first. She gives one to Denny, and he imitates his friend. When she can't tell who is imitating whom, she adds more items—bubbles, a snapper, a clicker, and a flashlight—until Denny is following his friend's lead in making things happen. Denny gets to his sensory threshold quickly, however, and bolts, throwing a toy. The therapist puts Denny on the swing and the friend pushes, then he climbs on with Denny and models requests for a push. The aide arrives with Sam, drops him off, and returns to class with Denny.

The aide plays in the dress-up corner with Denny, reinforcing the names of the body parts the teacher intended to work on earlier. Denny is joined by another child in the class, and the assistant helps them try on clothes, name body parts, and begin to symbolize the roles the clothing suggests. For example, Denny with a briefcase and hat is told he looks like "Daddy." The children look at themselves in the mirror. The aide tries to bring in a doll to represent a baby and offers Denny a bottle. Denny first tries to drink from it himself but then he puts it to the doll's mouth and smiles when the aide makes sucking noises. Denny is just learning that one object can represent another. The aide uses dress-up and doll play to work on these emerging ideas for symbolic play.

The bus monitor opens the door and announces that Denny's bus has arrived. The children in his class live in different sections of the city so, to minimize the length of the ride, the bus routes are arranged by class and neighborhood. Not everyone's bus arrives at the same moment, which has the advantage that the teacher can individualize each separation but the drawback that it brings uneven closure to the day. This is one of the compromises the teacher makes because the transportation system is so cumbersome. Denny is taken to the bus by the teacher, who gives him a photo of his parents in front of their house. She waves good-bye and belts him in. The teacher has taken on this task because Denny becomes agitated at this major transition and can upset the driver by screaming and kicking. If the teacher is with him and he has his photos, Denny is more accepting of the transition because he has her reassurance and the visual information about where he is being taken. It is important to remember that visually oriented, nonverbal children need visual prompts for all information, not just for structured tasks in the classroom.

Denny falls asleep on the bus and must be carried off by the childcare person, who greets him at his home. Both parents are at work, and his brothers will be home shortly. Nate, his caregiver, tries to arouse him with drink, food, and tickles, but in the end allows him to sleep about an hour, then tries to arouse him again. The pediatrician hopes that if he cannot sleep during the day, he will

sleep at night. So far this idea has not worked. Nate takes Denny to a special playroom (really the living room given over to play equipment), and Denny starts by jumping on the trampoline. Nate hands Denny balls, which he accepts and throws at Nate. This begins a jumping-and-throwing game, which has Denny laughing, and the gleam in his eyes appears. Nate keeps it going and adds Denny's brother to the game when he gets home. A playtime develops between Nate and the two brothers, with running, chasing, tickling, jumping, and throwing and lots of engagement, with gesture and facial expression for communication. Nate ends the game to take the two boys to pick up their brother at soccer practice.

As they walk down the street to the playground, Denny bolts ahead repeatedly, so Nate turns the walk into a race/chase game. When they arrive at the playground, Nate gives Denny chewing gum in the wrapper. He knows this will occupy Denny for a few minutes while he reunites with this brother and listens to the report about the practice. On the way home, the boys take turns kicking the ball to the brother, who runs down the sidewalk to receive it. At the house, Nate gives the boys a bath, a very social time with all three in the tub together. Then Denny's brothers take him to the computer and try to keep him engaged with one of his CDs while Nate handles some dinner preparation. Other days Denny will join Nate and helps him find things they need, as well as mixing, pouring, and cooking. This has encouraged Denny to experiment with new foods as well as provided opportunities for communication and fun.

When Mom arrives home, she sits with the boys and hears about their day. Denny drapes himself over her back, arms around her shoulders, and she rocks and strokes him while she talks with the other two boys. Dad arrives and the family sits down to dinner in the dining room. This is a brief event during which Denny barely makes contact with a chair but does circle round for physical contact with Mom and Dad. Following dinner the parents leave everything on the table for later and attend to the boys. They alternate participating in play and supervising a bit of homework for the oldest. The two older brothers go to bed with stories and cuddles. Denny is encouraged to participate but tonight, as on many other nights, he has his own agenda, so one parent follows his lead. Tonight they play on an indoor swing in the basement. (It is a piece of equipment the occupational therapist recommended for the home.) After the brothers are in bed, one parent attends to chores while the other plays with Denny until they are tired and need to try to sleep themselves. Denny has a soothing massage and is put in a toddler bed in the parent's room with cuddling and a story. The lights are turned off everywhere in the house (a signal to Denny that everyone is sleeping), and the parents hope that Denny will fall asleep within the hour.

Indications of Progress

Box 3 displays Denny's IEP. By the end of the first year year, Denny takes pleasure in interacting with people and has doubled the period of time he sustains engagement with adults or with a peer, with facilitation. He has learned that it is more fun to "play" with others, and both initiates and persists, insistent on getting his way. His interest in others has led to expanded symbolic play. Denny has begun to use toys to express ideas, although he would rather be in a role himself. He enjoys dress-up and puppets, which reduce the motor-planning challenges. Denny can pretend where he wants to go and what he wants to do based on real-life experiences. He appears to remember many details, which he can enact to demonstrate his understanding and improved reasoning.

Daily life has also become more enjoyable as Denny spontaneously and independently communicates his desires with the use of augmentative communication pictures. He also can sequence pictures of events to create complex requests. Although Denny now attempts to vocalize choices, his intelligibility is poor. He still requires pictures to communicate his intentions. But every connection to his voice is valuable. He will reciprocate vocally in song or play using sounds and attempts at words. Denny's sensory diet has enabled him to extend attention to seated tasks through completion, and both structured and semi-structured learning has improved.

Denny's parents are very pleased with Denny's progress in his engagement and affectionate play with them and his brothers. They are also pleased to hear of his progress in school and how much further up the learning curve he had advanced. Although they still wish he talked, they are encouraged by how communicative he can be with gestures and pictures. Of course, they want a good night's sleep but realize the number of nights he sleeps through is increasing in general, despite periods of night-waking. His improved engagement, desire to interact, and "clever" problem solving have alleviated many of their fears, and they now join him with more

Box 3. Denny's Individual Education Plan

All goals include establishing a foundation of engagement, continuous two-way communication, and affect.

ANNUAL GOAL: Improve functional developmental capacities

- *Objective:* Denny will sustain shared attention to a sensorimotor activity of his choosing for 20 minutes:
  a. mediated by an adult
  b. mediated by an adult with a peer
  c. initiated by Denny
  d. independently across contexts (with a peer; in a small group)

- *Objective:* Denny will sustain mutual engagement with an adult or peer for the duration of a sensorymotor activity lasting up to 15 minutes:
  a. using gaze to regulate interaction
  b. using gesture to regulate interaction
  c. showing emotional involvement in facial expression
  d. showing pleasure
  e. showing protest

- *Objective:* Denny will initiate interaction and show intention through gesture, facial expression, vocalization, in at least three naturally occurring events throughout the school day:
  a. to meet felt needs
  b. for pleasurable activity
  c. to protest
  d. to sustain two-way interaction

- *Objective:* Denny will imitate an adult or peer to create five purposeful interactions within an activity:
  a. using sensory motor equipment and gross-motor activity
  b. using sensory experiences and fine-motor activity
  c. using objects for representational/symbolic activity

Continued

Box 3. *Continued*

GOAL: Strengthen processing capacities and improve integration across modalities

- *Objective:* Vocalizations will increase over baseline when Denny engages in activities that arouse him using music and movement:
    a. humming/singing
    b. vocalizing choice
    c. reciprocating verbally with adult or peer

- *Objective:* Attention to seated pre-academic tasks will increase with oral stimulation and joint compression:
    a. integrate visual-motor capacities
    b. oral directions to visual pointing or picture choosing response
    c. visual prompt to oral or motor response

GOAL: Improve problem-solving capacities

- *Objective:* Denny will demonstrate knowledge of three-part temporal sequences to solve an adult-selected visual-motor problem:
    a. lead adult to desired object; manipulate setup of object for use; engage in appropriate use of object; communicate pleasure or satisfaction to adult
    b. increase independence in problem solving; complete without prompts or cues from adult.
    c. use vocalizations to express intention/anticipation

GOAL: Improve symbolic thinking

- *Objective:* Denny will show realistic routines from daily living in imaginative play with an adult:
    a. self-care routines–pretend to comb hair, get dressed, brush teeth, take a bath
    b. enact common household activities–talk on the phone, stir food in a pot, answer the door

- *Objective:* Denny will demonstrate understanding that one object can represent another by:
    a. Using pictorial representation by showing photos of objects to make requests for the actual object
    b. Showing identification with roles by using dress-up props and house play materials with appropriate intention and affect
    c. Using toys such as cars and trucks on pretend roads (line drawings), make a house with blocks, or make a tent with a sheet
    d. Showing a number symbol to correspond with a number of objects

- *Objective:* Denny will classify and sort objects according to category:
    a. with adult assistance in naming object and category
    b. with nonverbal independent choices

energy and excitement, recognizing how important affects and joy are for his learning.

Case 3: Mariah

Mariah, age 2 years, 9 months, was first referred for intervention at 16 months of age to an Early Intervention Toddler Program operated by her local school district because her family and pediatrician were concerned about global delays in her development. She was assessed by the district team as eligible for their early intervention services. By age 18 months, she was receiving a 30-hour per

week, home-based behavioral intervention in which tutors consulted with behavior therapists, an occupational therapist, and a speech and language pathologist. Through this intervention, Mariah learned some scripted language and compliance routines but was still unrelated and passive. Her family recently learned about the DIR approach and sought out a more relationship-based intervention.

Developmental Levels

Shared attention can be sustained around activities that provide firm tactile pressure, such as rub downs with lotion or towels. Mariah can also be offered favorite foods with strong flavors, such as bacon, to gain shared attention.

Engagement with significant adults is seen fleetingly in pleasurable interactions, usually involving touch and singing. More sustained engagement can be observed in battles over limiting Mariah's access to her obsessions. If Mom withholds Mariah's music tapes, Mariah will work hard protesting, with vocal communications of screaming and hissing, and with gestures, such as waving her arms, stamping her feet, or throwing herself to the floor. She will use facial expressions to communicate anger and disgust. Mariah does not initiate interpersonal interaction nor does she show spontaneous exploration or interest in play. In a room filled with toys, Mariah sits blankly on the couch and stares into space.

Two-way purposeful interaction is observed only in her pulling, gesturing, or screaming to regain possession of her tape recorder. The only self-initiated activity is an obsessive, repetitive listening to particular musical phrases on a children's audiotape. This activity has become a battle between Mariah and Mom for control of the tape player, because Mom is concerned about the self-stimulatory aspects of this interest and her disconnection from others as she engages in the listening. However, Mariah is very purposeful in her demands to have the recorder.

Complex problem-solving gestures are present when Mariah is highly motivated and the solution doesn't involve much motor planning. For example, she can desire cookies, go to the diaper bag, pull it open, search for the cookie bag, pull it out, and bring it to her Mom or tear it open, usually with her teeth.

Representational capacities are limited. No one has seen Mariah spontaneously imitate others, although with many repetitions she does learn simple routines. There is some recall of learned verbal requests, but not even presymbolic use of toys or pretend play. Photo or picture communication devices have not yet been tried but are a likely area of representational capacity.

Sensory Developmental Profile

Auditory processing is uneven, with lag time in her responses, even to highly motivating activities. Mom can show Mariah a favorite food and call to her to come and get it. While waiting an extended time for Mariah to initiate movement across the room, Mom assumes her daughter's disinterest and begins to put the food away. Her obsession with repeating specific phrases from her audiotapes is a sign of her attempts to control input and perhaps treat herself. The family is exploring auditory-processing assessments and interventions because this is recognized as an area of great need.

Sensory reactivity varies. Mariah is seen as an underreactive child who requires firm touch, strong flavors, big movement, and high affect to stimulate her responsiveness to her environment. She is most responsive to firm tactile pressure on her arms and legs. She shows no evidence of registration of gentle touch. Mariah likes bacon and red hots, whereas she is indifferent to typical foods of

early childhood, such as rice, noodles, or bread. On the other hand, she shows signs of high reactivity to certain sounds and to light. She will squint and turn away from the outdoors on a sunny day, or cover her ears at the sound of a motorcycle on the street.

Motor planning and visual motor coordination are areas of concern. Mariah can execute a sequential motor plan to retrieve something she desires, either by climbing or seeking the object put out of sight. However, her repertoire is limited, and her coordination and balance are poor. She may successfully drag a chair to a counter but may tumble off it as she climbs up. She may attempt to open a ziplock bag but quickly give up and bite through it as a strategy for access to the contents.

Visual-spatial processing is uneven. Mariah is able to retrieve objects from recall of prior location, but she may step too wide or too narrow to reach a surface she is climbing. At this point, it is difficult to differentiate her visual abilities from her motor issues. Her search techniques still are limited to looking in the last place where an item was found.

Affective processing tends to be low. Mariah appears to register strong affects of both pleasure and protest, especially if she receives them in opposition to her own intentions. Mostly, however, she is passive and flat in her affective expression and remains unaroused by her environment. She shows no evidence of spontaneous self-expression, either verbally or through gesture and facial expression. But she does respond with strong affective communication if her favorite things are removed or withheld.

Rate of progress has been slow. Although Mariah has made a few gains in learning simple routines and some vocalizations, her family is very concerned about the lack of progress in her spontaneous self-expression and relatedness. Here is an opportunity to integrate floor time and applied behavioral analysis (ABA). Floor time will be used to support Mariah's as yet untapped capacity to initiate interactions that support her connectedness to others. Some of the actions she initiates may be learned through imitation practice drills in her ABA sessions. Through floor time, Mariah can learn to spontaneously use some of the language she has learned through ABA, in the naturally occurring context of play. Mariah also will learn to solve problems she is motivated to tackle during floor time sessions. The kinds of motor sequences and visual-spatial tasks involved in solving such problems can be coordinated with both occupational therapy and ABA so that she is shaping her motor skills to enable her to be successful at her problem-solving attempts. The challenge to her team is to coordinate these efforts by creating a communication system that allows for new ideas to be initiated as well as follow through with step-by-step awareness of progress.

Current Intervention Program

Mariah's comprehensive intervention program consists of the following:

- Six to eight floor time sessions daily
- 10 hours of ABA at home
- 3 days a week at a special education preschool with a parent, as well as home visits biweekly
- Speech, occupational, and physical therapy at preschool

Mariah and her parents are just beginning a 3-day per week DIR-oriented preschool program to supplement 10 hours per week of continued home-based behavioral intervention (ABA). The parents worked with other families in their school district to encourage the district to offer a relationship-based intervention as an alternative or as a supplement to the district's behavioral orientation. The

preschool program will provide family-based services either in a center or in the home for eight families. Mariah and her parents will participate at the center 3 days per week and have one home visit every other week. The center program includes early childhood special educators with a special interest in DIR, a speech-and-language therapist, occupational and physical therapist, a school psychologist, and a nurse. The professional staff has been learning to work together in a DIR approach and will continue to work with a mentor for the academic year.

Mariah's parents are completely dependent upon the school district services for their intervention program. They have a strong commitment to personally provide six to eight floor time sessions with Mariah at home. The mentor working with the school staff has agreed to help the parents learn to use tasks from the 10 hours of home-based behavioral intervention in their floor time sessions. The ABA tutors will supply the DIR preschool with all the objectives and data on trials for each week. The DIR mentor will then work with the staff and parents to understand how to weave in opportunities for spontaneous practice through play during floor time sessions using similar materials and prompting/facilitating statements. For example, a receptive language exercise in which Mariah follows a command to shake a toy can be followed up in a floor time session with rattles, maracas, and other shaking toys to make music or a parade. This offers Mariah a chance to lead the shaking and have Mom imitate her.

Similarly, the DIR staff will inform the ABA providers of the activities they are working on with Mariah, especially in the areas of self-initiated activity and sensory diet issues that help Mariah sustain attention and focus. For example, the DIR staff found that Mariah loves to jump and is very engaged with them when they play jumping games. She uses gaze to regulate interaction and gestures and verbalizes to invite staff to play jumping games with her. Working with the occupational therapist, everyone learns that jumping helps Mariah organize her orientation in space and improves her focus on visual-motor activities. ABA tutors begin to use jumping off the couch as a reward just before they present a visual-motor task, such as a puzzle.

A Typical Day

Mariah is awakened by the strong smell of bacon cooking in the kitchen next to her bedroom. Her mother has learned to wake her this way because it helps prevent a struggle with Mariah in making the slow transition from sleep to wakefulness. By the time she serves the breakfast to the family of five (Mariah has two stepsisters who are teenagers), Mariah is tugging on her mother's pant leg, requesting bacon. Mariah is placed in an adaptive seat and strapped in to keep her at the table, preventing loss of balance and having her wander away. Mom holds all the bacon and toast, giving Mariah small pieces after coaxing her to make a verbal request, which she does. "Want" is clear but the "b" and "t" for bacon or toast are indistinguishable, so Mom holds up one of each and lets Mariah's gestures indicate preference. She is working with her team to integrate the ABA and DIR models of intervention. Mom has learned from the DIR program to use choices and gestured responses as complete communications, but she also ritualizes the meal to make it more predictable for Mariah. Mom reports that Mariah has been more willing to participate in such interactions since she (the mother) has learned to embed them in naturally occurring events, such as breakfast, and to offer choices and encourage Mariah to show her preference. The teens leave with their

boom box blaring, and Mariah grimaces and screams until they are out of range. Because time is short, Mom quickly dresses herself and Mariah for school and takes her to the center. She wonders when she will be able to use visual communication strategies to encourage Mariah to dress more independently. Mom worries that she should make time for Mariah to be involved in dressing herself, and makes a mental note to add dressing to her list of requests for the occupational therapist. (The therapist will also teach the behavioral tutors routines for teaching Mariah to dress so that some part of her sessions can be used for practice.)

The school classroom looks more like a family room in the home of a large family, with couches and rocking chairs, area rugs, and baskets with toys, as well as well-stocked cabinets. One area is set up as a makeshift kitchen with a sink, a microwave, a toaster oven, a table, and chairs. Because the parents are attending the school with their children, the room is made comfortable for adults. All sources of sensory irritation have been reduced. The carpet is made of natural fibers and the fluorescent lighting has been removed. The parent group has decided to focus on healthy eating with an attempt to eliminate additives, sugar, casein, and wheat. Mariah's parents both work, so they have divided the time with her at school, each coming half the hours. They have successfully used the Parental Leave Act to secure the time to participate in the class with their daughter.

The teacher greets Mariah and Mom, while other staff greet other families. They go to a corner of the room that has a rocker and a table with sensory toys on it. The teacher coaches Mom to let Mariah explore the materials freely and to follow her lead. Mom resists the urge to prompt Mariah and tell her what to do. This period of time was designed to encourage initiative in her daughter. The teachers will watch Mariah's spontaneous behavior to discover whether it is inhibited by difficulties with motor planning, coordination, or sequencing and report back to the ABA tutors so that incrementally shaped trials can be developed for tutoring sessions to support Mariah's spontaneous interests.

For now, the teacher talks with Mom about the goal of helping Mariah initiate for herself so that she will become less passive. Rather than telling Mariah what to do, Mom tries to find out what interests Mariah. Mariah begins to push at some play dough, so Mom pushes at it too. Spontaneously, Mariah looks up at Mom and their eyes meet. Mom is thrilled with this spontaneous gaze and offers Mariah some play dough. Mom rolls the play dough in her hand and makes a ball. She gives the ball to her daughter, and Mariah accepts it. Mariah then gives her Mom the play dough she has been holding. The teacher helps Mom see that Mariah has just closed a circle of communication by reciprocating her mother's gesture. Mom understands that no command to give the dough had been made and that this interaction has been spontaneous on her daughter's part. Mom takes the dough from her, and Mariah pushes her mother's hand, which Mom responds to as a request to make another ball. Mariah is initiating around play, opening and closing circles of communication.

Soon Mom is making balls from the dough her daughter gives her and giving it back to her daughter, who is arranging the balls in a line. Mom worries about the line but the teacher focuses Mom on the reciprocal nature and spontaneous eye contact in their interaction. Lining-up is discussed as something to work on once engagement can be sustained. The teacher talks to the mother privately about how they won't focus directly on eliminating the perseverative or rigid behaviors because she believes that, right

now, Mariah needs to feel as though she has some control in her environment. Therefore, they will focus on the pleasure of interaction and help Mariah find a repertoire of new behaviors that she can take pleasure in, master, and control. As her sensory needs are addressed and her repertoire enlarges, the rigid, self-stimulatory behaviors will fade. Mom sighs with relief and recalls some terrible battles with Mariah when she tried to extinguish her daughter's self-stimulatory behaviors. Mom wonders how this will be coordinated with the behavioralists. The teacher explains that they will gently reorient Mariah to attend to the task they have in mind for her. If they are unsuccessful, they will use a sensory break suggested by the occupational therapist to reorganize Mariah for the next set of trials. The DIR and behavioral models will integrate their orientations, using the discrete trials primarily to teach imitation and shape motor planning and visual-motor organization.

The teacher suggests that Mariah might like a snack and talks with Mom about how transitions are made at home. Mom points out how dependent she is on routines to keep Mariah from becoming upset. After some exploration, the teacher discovers that Mariah makes transitions best when she can see what is going to happen. The teacher introduces the idea of using photographs to help explain the next event. She takes a photo of Mariah with Mom and the play dough to use the next day. She brings Mariah a photo of snacks on the table and Mariah goes calmly to the table, leaving the dough behind. The teacher makes a note to integrate visual materials into Mariah's total program, both in the DIR preschool for practicing sequences and during her one-on-one structured learning.

The speech therapist is at the snack table, talking to several parents about his observations of the children's oral-motor needs. He can use his observations of the children while they bite and chew to help the parents understand why their children's speech is not yet clear. Based on oral-motor needs, he suggests different kinds of snacks for each child. Mariah's Mom is familiar with using food as a reward, and she begins to withhold the snack until Mariah vocalizes as Mom instructs. The speech therapist talks with Mom about the importance of wooing Mariah to vocalize by creating the right level of stimulation and affect in the environment. He helps Mom pretend to eat and make satisfying 'mmm' sounds and then to offer the snack to Mariah. She accepts and puts her lips together, watching Mom's face as she takes the food. The therapist helps Mom see what Mariah is doing spontaneously to learn the "m" sound. Mom is especially interested in the difference between wooing her child and making demands. The speech therapist helps Mom with the fine line between the two and notes that wooing includes keeping the interaction pleasurable and fun for the child, using the affective connection to entice the child to sustain engagement in the process, and avoiding stressing the child so that she becomes disorganized. He clarifies the similarity in these objectives for intervention in both the DIR and ABA approaches.

Mom and Mariah go into a big gym to meet with the occupational therapist, who invites Mariah to explore. She climbs into a lycra swing and closes it over her. Mom wants to uncover her and the therapist talks with Mom about how much new stimulation Mariah has been exposed to today and encourages Mom to make a little game of peek-a-boo in the swing. This is a more gentle entry into interaction and a way that enables Mariah to take some initiative and reciprocate voluntarily to Mom's invitation. By the time they are ready to leave, Mariah is uncovering herself and peeking out at Mom

with a big smile. The therapist talks with Mom about the purpose children may have in protecting themselves or maintaining a feeling of self-organization when they engage in behavior that seems inappropriate or not optimal for social-skill development. The occupational therapist thinks with Mom about the sensory processing meaning of her child's behavior and then decides how to approach the child to bring her back into interaction without disorganizing her. The therapist will discuss this understanding of the child's sensory needs at the team meeting coming up this week.

Mom and Mariah leave the first day at the new school with hope renewed. Mariah had spontaneously initiated social contact with Mom just for fun several times. Already the repertoire of her interests had increased, and she had not spent a passive moment all morning.

Indications of Progress

Box 4 describes Mariah's IEP. By the end of the year, Mariah was able to engage in meaningful affective interactions with her parents and teachers. She could initiate interactions to make requests as well as to just have fun. Mariah has a growing repertoire of words she learned through her behavioral intervention that she was using spontaneously in interactions with her family and teachers. Her Mom reported that she was reciprocating for so many circles of communication that she had stopped counting. Both the DIR and ABA practitioners learned from each other. The DIR practitioners were more appreciative of structure and gave many choices within a reliable routine for the school day. They learned the value of shaping play and interaction for small increments of change that support the child's experience of success. The ABA practitioners came to appreciate the individual needs of the sensory system and to make adjustments to "feed" Mariah's sensory cravings. They were taken with the power of wooing the child as part of the system of positive reinforcement and adopted a style of keeping interactions going rather than stopping them in order to provide praise or reinforcers. In addition, they played with Mariah during breaks rather than sending her off alone.

Mariah's parents are thrilled with the new positive mood of their daughter. They saw her as more connected to them, more responsive, active, and self-initiating. They felt more competent as her parents, knowing how to think about what was inhibiting her responsiveness or causing her withdrawal. As her parents, they felt they had many more strategies at hand to handle unpredictable situations as well as engineer life for smoother days and nights. They were relieved that they could now attend gatherings of their extended families or at their church with Mariah. The family could now spend pleasurable time together at home and in their community.

SUMMARY

The educational models and the three cases, in particular, illustrate the wide range of educational interventions needed in comprehensive programs in order to achieve effective outcomes just during the course of one year. As these children strengthen and expand developmental capacities, they will be able to reach the next levels, because they have been provided with foundation skills for learning. Each child will progress at different rates relative to his or her unique strengths and weaknesses but each child should keep moving forward with continued, comprehensive educational programs.

The answer to what programs do work and for whom cannot be simply answered. It has been extremely difficult to evaluate program effectiveness. In order to compare

Box 4. Mariah's Individual Education Plan

GOAL: Improve Mariah's interest in and capacity for reciprocal social engagement.

- *Objective:* Mariah will sustain engagement in sensorimotor interactive play with a special adult for 10-minute periods 2 times per day at school and 5 to 6 times per day at home. Mariah will show engagement:
  a. By facial expression–smiles, wide eyes, upturned mouth–and through gesture (takes adult hand, signs or motions for more, pulls adult to object of desire).
  b. By verbal expression–laughing, cooing, words–and by showing that she is reciprocally involved with the adult in an activity, such as water play, play dough, putting lotion on her skin, pulling stickers off her clothing, chase and tickle games, and variations of peek-a-boo.
  c. By her seeking out the adult, showing anticipation of the next interpersonal exchange, offering objects or herself (e.g., takes a cup to pour water, puts arm toward adult for more lotion).

- *Objective:* Facilitated by an adult, Mariah will sustain engagement with a peer "expert player" for 10-minute periods 3 times per day.
  a. Mariah will make an ongoing relationship with one peer carefully selected for his/her interest in Mariah. Mariah will show interest in interaction with the peer as with the adult (above) in activities of high interest to her, such as sensory play, music, and snacking.
  b. At snack time, Mariah can be in charge and gesture to invite her friend to the table. She can inquire if her friend wants juice and pour for her from a small pitcher with which she can succeed. Mariah can give out cookies at her friend's request.
  c. Symbolic links can be made with circle cookies that roll or mini-bagels that can be held up as eyeglasses. Snack can segue into water play by washing the snack dishes and cups, dividing up jobs such as squirting soap, making bubbles in the water, scrubbing, and drying. Such activities teach sequencing of events, fine motor skills, motor planning, and the target, reciprocal sustained engagement.

GOAL: Improve Mariah's spontaneous interpersonal communication.

- *Objective:* Use moments of high affective motivation to elicit spontaneous verbal and nonverbal circles of communication with Mariah 20 or more times per day as they occur in the natural environment or as can be elicited with nonverbal temptations.
  a. During snack time, place a favorite snack in a container that is challenging for Mariah to open so that she will need assistance (and also benefit from practice with a fine motor skill). Provide support by offering adult proximity and gestural and verbal interest, such as "Need help?" or "What do you want?"
  b. Wait for Mariah to initiate, even by pushing the container toward the adult, and keep the circles of interaction going as long as is tolerable and fun for her. For example, do not just open the container and hand it to her after one gesture. Play dumb and silly. "Oh, this, how nice, a hat?" and put the container on your head. Visual humor and silliness are usually the key to keeping her engaged without introducing disorganizing frustration.

GOAL: Improve Mariah's comprehension of interpersonal communication.

- *Objective:* Mariah will connect learning of language to meaningful experiences through an activity-based approach to learning throughout the day.
  a. Mariah will learn the intentions and meanings of verbal communications through the manipulation of objects and the consequences of her requests and actions. For example, say you are teaching the concepts of "big" and "little." Mariah wants a piece of bacon from her lunch box. The adult asks, "Do you want a big piece or a little piece?" Mariah hears "little" last and repeats "little piece," even though she really wants it all. She doesn't have the comprehension for words related to size yet and still echoes the last thing she hears. Now, the adult gives her a small piece torn off the end of the strip and says, "Here is a little piece." Mariah's disappointment is evident by the

Continued

Box 4. *Continued*

expression on her face and her gesture to reach for the rest of the bacon. The adult empathizes, "You didn't mean little piece, you want the *big* piece." After several rounds of this kind of exchange, Mariah asks consistently for the big piece, and the adults expect that she has reached a new level of understanding. This approach is carried out with various things she wants throughout the day, such as the big crayon, the little bubbles, the big paintbrush. In this way, the concepts of "big" and "little" start to take on experiential meaning.

GOAL: Improve the quality of unstructured interactions within the family.

- *Objective:* Through the family-focused center and home-based program, assist Mariah's parents in developing mutually gratifying ways of relating to Mariah that support family cohesion and pleasurable interaction.
  a. Help parents work together on Mariah's behalf and develop a shared language for understanding her difficulties.
  b. Facilitate parents' discussion of their perspectives about how to help her and how to be with her at home.
  c. Develop mutually gratifying patterns of relating that use invitation and wooing, supporting positive feeling and sustained interpersonal engagement.
  d. Assist parents in the classroom to recognize and participate in successful social activities with Mariah.
  e. Meet with parents bimonthly to share ideas about how to engage Mariah in the less structured household activities. Teachers can offer opportunities for practice in the classroom, for example, someone comes to the door and the teacher has to greet them. What can Mariah do? What does the teacher do with Mariah before she attends to the person at the door?

The above goals and objectives are designed to support the development of Mariah's spontaneous self-expression, reciprocal engagement with adults and peers, and capacity for self-initiation. They are goals designed to ameliorate the core developmental issues in autism. These interactive, relationship-based interventions should not be implemented only in a complementary fashion with discrete trial training during which the focus of the goals is on compliance and prompted discrete-trial demonstration. Rather, these instructions are essential for the generalization and spontaneous use of what is learned through behavioral reinforcement.

educational programs or curricula and the degree to which they contribute to individual outcomes, both child and program characteristics need to be considered. Today, children falling under the autistic spectrum umbrella have very wide variations. To know which children are being addressed requires more than matching age, IQ measures, or even symptom lists, as is frequently done in outcome studies. Instead, multidimensional profiles and functional capacities are needed to identify the children in meaningful ways, with relevant measures of primary deficits in relating and communicating at entry and outcome (Greenspan & Wieder, 1997).

In order to compare educational approaches, it is necessary to identify the various elements of the educational models as well as their various operative elements, including intensity, quality, and skill of the providers; related services; and family interactions. Research designs that could take all these variables into account do not yet exist, and existing studies on program outcomes make claims that are questionable if not misleading. Programs often select certain children for study rather than sample from different groups. The study often is based on what is easy to measure or teach without considering all the real variables that are part of the child's

intervention, in addition to the educational program, including other therapies or family approaches. Such research challenges make it clear that some questions are not going to be easily answered because it is not possible to control so many variables.

The challenge of evaluating program outcomes remains daunting. Data-driven programs, such as ABA and special education approaches, have not fulfilled their expectations. To date, there is little or no large-scale evidence supporting the effectiveness of these models, although large-scale funding continues to be poured into these programs—with limited results. Children often receive additional services beyond the educational programs offered at school. In addition, within educational programs, additional interventions such as speech and occupational therapies may be added to address specific processing deficits involved in developmental disorders.

While pursuing more effective approaches and measures based on functional capacities and educational gains, standards of practice can protect individual intervention and program integrity. One problem with program outcomes is that programs distribute their resources according to criteria that do not necessarily reflect the individual needs of each child. For example, a nonverbal child with auditory processing and oral-motor difficulties may be in the same class as a child with pragmatic language issues. They both receive the same 30 minutes per week of speech-and-language therapy in a group, even though each child really needs daily individual therapy. The program may not have the personnel or funding needed to provide the appropriate services and program outcomes would mask individual results because what was needed was not provided or integrated into the group.

Using the model of clinical trials may still be useful if it starts with cases based on developmental profiles that capture the functional capacities of children as the baseline for research, with children and their individual progress clearly identified. Informative research design utilizes a theoretical model from which a hierarchy of goals are evaluated. Evaluation is based on individual, multidimensional profiles of children receiving comprehensive interventions.

Until more and better research can be conducted, it is important to evaluate outcomes based on each individual child's functioning, for whom appropriate baseline evaluations have been conducted so that each child is evaluated relative to his or her progress. The program should be evaluated on the basis of how well it fits the individual child's needs reflected by his or her rate of progress.

Educators may still be debating the core philosophical issue about whether special education is intended to find special techniques for teaching ordinary school skills, such as reading, writing, and arithmetic to children, or whether the intention is to cure or ameliorate the disability to the fullest extent possible by whatever means are effective. This comes up often with PDD and autism because the social deficit is so central. But many disagree about whether the purpose of school is just to learn or to learn and to discover how to make friends and relate to others. It is in the latter area that some goals, such as staying on task, completing work independently, or compliance, are seen as developing school-related skills by many districts.

The DIR approach does not separate goals of academic success and social success but approaches the child from the perspective of achieving both. Attempts to separate the two are unsound because the same developmental foundations are involved in both. The hierarchy leading to reading comprehension,

thoughtful writing, and mastery of history, science, English, and math begins with the abilities to attend, engage with others, communicate purposefully, use symbols creatively and logically, and think. On the other hand, mastery of the essential academic and social foundations of attending, relating, communicating, and thinking opens the door to higher-level abstract thinking capacities and lifelong new learning. Without mastering these foundations, a child will be limited to fragmented, rote memory skills, such as reading without comprehension, counting without understanding, or solving problems, communicating, and thinking in only a fragmented, scripted, and concrete manner. True comprehension of English, history, or science will not be possible.

In this chapter, DIR educational guidelines have been proposed as a comprehensive model that embraces traditional, school-related goals only when a foundation of core developmental capacities to relate socially, communicate interactively, and to think is part of the work focus. Individualized approaches are then used to keep each child moving forward. ■

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The Action is in the Interaction: Clinical Practice Guidelines for Work with Parents of Children with Developmental Disorders[i, ii]

Rebecca Shahmoon-Shanok, M.S.W., Ph.D.[iii]

What is good for parents is good for their children. What is good for their children is good for parents. Aiming for both stimulates good outcomes. The invisible but powerful thread is relationship.

PARENTS AS "CENTRAL ORGANIZERS" FOR THEIR CHILD

All children need parents to keep them safe, to notice and respond to their needs and achievements and—gradually and over time—to bring them into the human community through interactive relationships, which include love, shared attention, evolving communication, and the burgeoning of symbols, of narrative, and of values. Indeed, the primary social institution responsible for children is their family, with their parents in the lead and at the heart. Families render humans human. Recent research and clinical experience demonstrate that such primary reciprocal attachments support, mediate, modify, and organize a child's genetic, central nervous system endowment to a far more significant degree than previously understood in areas as fundamental to later adaptation and achievement as cognitive and emotional intelligence, language, personality, and relational style (cf. Ainsworth et al., 1978; Greenspan, 1997; Schore, 1994; Siegel, 1999; Sroufe, 1983). It is, therefore, in society's best interests that parents function optimally—or at least satisfactorily—during their children's developing years.

Children spend many, many hours in the context of their family life. Those with relational and communicative challenges have a harder time than typically developing youngsters in engaging others constructively, even within their own families. Their parents also are often at a loss in knowing how to constructively fill their children's time and get them through simple daily requirements. Parents may resort to television and videotapes to help their children get through the day, rationalizing that they are at least learning something when memorizing bits of scripts or songs. Parents may give up when their children engage in perseverative or self-stimulating behavior.

As Stanley Greenspan (this volume) has noted, most parents are happier, more productive, less stressed, and more apt to view

themselves as competent, resourceful parents, able to meet their child's needs when they can involve their child—by themselves and/or through others—in a rich, interactive, home-based program. "In fact, these interactions at home can become the most important factor in (children's) growth" (Greenspan & Wieder, Chapter 12, this volume). This same observation holds true for parents! To become—and feel like—a capable parent, an individual finally *needs* to interact productively with her child.

And just as parents of typically developing children are their first and most profoundly effective teachers, parents of children with developmental, communicative, and relational disorders are as well. As pediatrician and psychoanalyst D.W. Winnicott quipped decades ago, "There's no such a thing as a baby," by which he meant that it is nonsense to consider the development of a young child outside the context of the adults who surround him night and day. A parent (or two) is, quite literally, the center of the child's emotional, social, and learning world. This happens spontaneously during everyday playtimes, feedings, bathtimes, and bedtimes (Shahmoon-Shanok, 1997b). Although the needs of these children may be masked by their avoidance of human contact, young children with serious relational and communicative challenges urgently require meaningful interactions with their parents. Paradoxically, their challenges prevent them from making their needs—and how to respond to those needs—known to parents.

When a child has severe difficulties relating and communicating, these obstacles affect not only the child's development. They also bear upon the parent's sense of self *and* the *relationship* between the child and his parents. Children with developmental disorders are compromised not only because of *constitutional* challenges but also because of *relational* challenges (which usually stem from constitutional challenges and ensuing mismatches). Clinical or educational practice that addresses only the child's symptoms and behavior, rather than the underlying processes, must be revised to address the *context;* that is, mutual regulatory processes with intimate caregivers. Every element in a system reverberates—or not—with the others; when one element is stuck, it constrains the others (Sameroff & Friese, 1990; Shanok, 1981, 1987, 1990). As evidence mounts that children with difficult temperaments are more vulnerable to and modifiable by parental influences (Thompson, 1999), it becomes more evidently critical that the field of early intervention integrate a range of services to help parents cultivate growth-promoting relationships between themselves and their children. Therefore, working with the individual needs of parents is crucial to treating their children.

Special Challenges for Parents of Children with Special Needs

Children with special profiles have a profound, ongoing reliance on their parents as primary loved ones, as intermediaries, and as advocates. Yet, to be able to meet the particular needs of a child with a developmental disorder, parents must meet the following six profound challenges, which go well beyond the usual, already heavy demands of parenting young children.

1. *Parents must come to recognize the precipitous risks of their child's disability*, even as they cope with deep feelings of disbelief, loss, grief, confusion, isolation, helplessness, fear for the future, and "why me" anger.
2. *Parents must overcome the sense of mystification, distance, and rejection* inherent in their child's idiosyncratic,

perseverative, and impoverished range of behaviors and interactions.

3. Instead, *parents must learn to notice, observe, and read their child's odd and frustrating behaviors as individual differences*—meaningful signals explained by specific sensory processing and perceptual-motor capacities and challenges—in order to cross the bridge their child cannot yet cross, to meet and draw the child over and into interactive relationships.
4. *Parents need to recognize themselves as the central, organizing, and contingent force on behalf of their child*, even within the professional context of various assessments and interventions.
5. *Parents must recognize, welcome, and respond contingently to their child's increasingly complex functional communicative, cognitive, and emotional levels* (Greenspan & Wieder, 1998)—a complex challenge with children who tend to pull for sameness. For parents, this means recognizing that just when they become accustomed to dealing with one level, they must shift to another to keep up with and/or to stimulate their child's incipient growth.
6. *Parents must become knowledgeable, effective, and engaged advocates for their child* within a complex and grossly uneven maze of assessments and services.

In order to overcome these challenges, virtually all parents of children with a developmental disorder need facilitating partnerships with the professionals who serve their children. They may be so uncertain that they can generatively parent this child that they may need help to discern that their child favors them above others and that *they* have the central role to play in his improvement. Given facilitative partnership, some—perhaps even many—parents are able to meet at least the majority of these challenges.

However, the range of individual differences is as great among parents as among their children. With personally tailored supports, many more parents could become the significant resource that their children need them to be. When it is noted that, on the one hand, early parenthood is itself a time of enormous vulnerability, transition, and potential growth, and, on the other hand, that no professional, no matter how deeply committed or involved, can substitute for the profound impact parents have on their child, the magnitude of significance—and of potential—to parental inclusion may be grasped.

With the 1996 passage by the United States Congress of the Individual with Disabilities Education Act (IDEA), the field of treatment for children with disabilities took a significant step in the direction of parents by mandating the Individualized Family Service Plan (IFSP). However, the field has not yet focused on how to engage and respond to the enormous range of parents, nor has it attended to the differentiated, comprehensive spectrum of services and education needed to support not only parents but the staff who potentially could work with them.

Consequently, some professionals who work with challenging young children still conceive of *themselves* as the central rehabilitative agent for the child, even though it is *parents* who are their children's first, most significant, and life-long teachers. The contribution of parents is underscored by a quantitative analysis of early intervention programs serving disabled children and their families that found that "programs that ... targeted their efforts on *parents and children together* appeared to be the most effective" (Shonkoff and Hauser-Dram, 1987, p. 650, italics added). When the early intervention field recognizes that, for children with difficulties in relating and communicating, it is not only the child who needs assistance but, by definition,

also the relationship between parents and child that must be supported, the focus of treatment becomes liberated. Clinicians may then see that the needs of parents and children are felicitously intermeshed in that parents need—and children need their parents—to reclaim their role as fundamental teachers. The less experienced or mature the parents and the younger or more challenged the child, the more attention this area will require. But all parents benefit from a developmentally sensitive alliance for how to "read" their child so that their child may become engaged with them.

Just as the recognition of each child's unique needs is placed in a developmental-relational understanding of typical childhood, so, too, must the understanding of each parent's needs be placed within an understanding of adulthood. The next section, "Parenthood and Parenting as a Marker of Adult Development," briefly describes the nature of adulthood and the developmental-relational facets of parenthood within that context. The chapter then goes on to address the following major topics:

- Parents and professionals as complementary, reciprocal, yet asymmetrical partners.
- Evaluating and working with a child conveys meaning to parents.
- Establishing and maintaining relationships with a range of parents.
- Developmentally appropriate practices and interactions: Using the concepts of relationship, individual differences, and development to understand parents, organize information, and intervene generatively.

PARENTHOOD AND PARENTING AS A MARKER OF ADULT DEVELOPMENT

Although development continues to occur in the adult years, it is different from development occurring in childhood. In contrast to the burgeoning maturational forces of childhood and adolescence and to the decline of late life, adulthood is freer of an age-related timetable. Parenthood may begin anywhere within a period of 35 or more years for women and an even longer span for men. Rather than the sequential emphasis that typifies the unfolding earlier life stages, adulthood is instead characterized by increased layering and complexity among aspects of the self and between the self and the social world (Seligman & Shanok, 1996, 1995a, 1995b; Shanok, 1981, 1987, 1990, 1993). Context is a critical thread in this rich fabric. Picture, for instance, parenting a baby dearly desired following several miscarriages in contrast with parenting a baby conceived in error.

Yet, whereas parenthood is intrinsic to a mother's development as a woman and a father's as a man, it is only one among several other marker processes, all of which affect the capacities for identity and intimacy in that person. Nonetheless, parenthood does *mark* adult development. But, although it is interconnected in a cogwheeled manner to the child's development, parenthood is not *itself* a developmental stage for the adult (cf. Benedek, 1959; Galinsky, 1981). Imagine, for example, how different an experience it is to become a parent at age 15 compared with becoming one at 45.

Visualize the daily care a small child requires: Parent*hood* is a role, a career, a defining activity. Parent*ing* is an intimate, evolving, and demanding relationship of enduring impact. Parent*hood* profoundly affects the experience of, and structures for, identity. Parent*ing* influences the capacities for and evolution of intimacy processes (Shanok, 1987, 1990, 1993). People become parents through experience, by "doing and being" (Musik, 1993).

It is in the nature of parenthood that, especially when a child is young, the parent's

sense of well-being is inextricably tied not only to how she judges her child to be faring (cf. Galinsky, 1981; Shanok, 1987, 1990, 1993; Stern, 1995) but also to how she judges herself to be doing as that particular child's parent. Parents *need* to feel that they are ample resources for understanding and caring for their young child. Indeed, there is likely no greater wound to a parent's fledgling sense of competence as a parent, and of relatedness as *this* child's parent, than to see and feel the child losing developmental ground and turning away from their relationship, all the while not knowing how to help him.

As a marker process, becoming a parent is, by definition, a long transitional period of great openness and, thus, of both potential and vulnerability. What new mother doesn't recall being deeply upset, angry, or both by an ill-chosen remark from a stranger about her child? When that new mother *knows* there is something wrong with her child, and the stranger is a professional whom she believes understands far more about such topics than she does, the power to support or to undermine confidence and functioning is greatly intensified.

Thus, it is with abiding awareness of the power to potentiate or disequilibriate that any professional who evaluates or intervenes with a child must work. Indeed, it is not sufficient to evaluate and/or to treat a *child*. Concurrently, care and attention to the emotional state and attitudes, the resources, and the dilemmas of the adults responsible for that child are also required. When parents are able to function resourcefully and effectively with and on behalf of their child with special needs, that caring, careful professional attention can remain informal and in the background, at least until the first components of the child's program—which should always include parents as much as is feasible—are underway.

Still, professionals need to bear in mind that the fact of having a young child with special needs forces parents to cede some of their rightful centrality to virtual strangers. Parents become caught in a paradox: Their autonomy and authority is eroded while their child's particular challenges heighten and lengthen his dependency upon them. Supporting a dawning sense of satisfying centrality within parents is a critical, if often poorly understood, piece of the clinician's role *on behalf of the children*, parents, and families they serve. Bearing in mind that the parents' sense of self and capacities for relationship are being *marked* by the overall experience of parenting this child, and that these, in turn, profoundly affect the moment-to-moment availability of parents to the child, the professional must respect the parents' central roles and help them build on the child's strengths.

To illustrate how a child with developmental challenges may affect not only a parent's identity as a parent but also that person's very capacity *to* parent that child, consider the following case vignette. It has been selected to highlight the importance of working *within* the relational interface between parent and child—for the sake of the parent and on behalf of the child.

"Working with Ezekiel's family was difficult both because this child was hard to understand and because his parents (Phil and Roz), and especially the father, found it very hard to accept how reactive Ezekiel was to a range of stimuli. Early in my work with the family, the father, an outwardly jolly and confident fellow, began to relax enough to find words to reveal that he felt rejected by Ezekiel every day. I asked Phil to describe the scenes in detail, as though they were a movie which I could not see. What would happen routinely, I gathered, was that Ezekiel and his mother would usually be together in his room

at the time that Phil, a big bear of a guy, would arrive home from work. Eager to see his family, he would burst in with 'Hullo's' and 'How are ya's?' He would frequently bring a big gift in a (noisy) bag. Ezekiel would resolutely avoid looking in his father's direction. Phil believed that Zeke was not ready to give up cozy time with Roz, and that, in fact, he *preferred* mom. This hurt Phil, who tended to give up trying to make contact with his son for the rest of the evening. 'I'm not important to Zeke,' he would surmise. 'Roz can do it better. I'll (*turn off the pain by*) watch(*ing*) TV.'

Because the early intervention program Ezekiel had been attending had not offered Phil and Roz details about their son's processing and sensory system in ways they could comprehend and identify with, Phil found it difficult to believe that Zeke's behavior could represent his effort to cope with too much stimulation coming at him at once. It was also quite painful to Phil to imagine that Ezekiel had unique sensitivities. Insulting as it was to believe that Zeke preferred his mother, given his own demanding father, that was easier for Phil to bear than to recognize the vulnerability of his boy.

I proposed to Phil and Roz that Phil try this approach for a week: He would bring nothing into the room when he arrived home and, in fact, he would himself linger very quietly in the doorway. Only once Ezekiel appeared to register his father's presence, could Poppa gently smile and wave—no big, fast movements, no sounds. 'Let the first move for further contact come from Zeke,' I suggested, to give Phil a visible benchmark before taking another action.

Although he was doubtful, Phil agreed to try this approach. Even I was surprised at how well and how quickly the strategy worked. On the first evening, Phil silently leaned in the doorway for about one full minute, he told me later. Ezekiel looked up, looked away momentarily, looked up again, looked away, a hint of a smile beginning to tug at one corner of his lips. With his head still averted, he murmured in a low voice, 'Pop,' and smiled slightly. Utilizing enormous restraint, Phil remained where he was, quietly beginning to beam. His wish then came true: Ezekiel gazed at him, looked away, got up, sidled haltingly over to Phil and, at last, hugged his legs. This experience with his child contributed to a turning point in Phil's relationship with Zeke, in my relationship and work with Phil, and in Roz's sense that she could count on her husband as a father. Phil was so happy to garner his son's attention, he became better able to consider and be sympathetic to Zeke's sensory profile (Shahmoon-Shanok, 1997b)."

Relationships hold the potential to help people grow and change. By reinterpreting the reasons for Zeke's behavior and suggesting an alternative approach to try, the therapist enabled Phil and Zeke to have an interaction far more satisfying for both of them. Such experiences add up over time to mark each individual involved.

A central tenet of this chapter is that all children, and especially those with severe difficulties in relating and communicating, actually become differentiated socially, emotionally, and cognitively in everyday, ongoing, nuanced interaction with their parent(s). Another central point is that, with their children's special needs as profound inspiration, parents' relationships with professionals can similarly have a deep effect on their own growth as parents, as adults, as a couple, and on their abilities to affect and help their children. As parents begin to believe that they can relate to their child and help him unfold, wholesome developmental forces are unlocked, liberated to energize all that comes next. People find out who they are in their

every day, every hour experiences with each other. When Phil found that Zeke would welcome him if only his son was not overwhelmed, Phil was learning that he could provide what was needed, and that he was ample as a father. He could then bounce back to be with his highly sensitive son and Roz could feel partnered. Just as children come to know who they are by their hour-by-hour experience with others so, too, do their parents. As has been said, the action is in the interaction.

PARENTS AND PROFESSIONALS AS PARTNERS

In designating the IFSP as a requirement, Congress pushed the field of early intervention into taking a significant step forward by recognizing parents as significant partners. What the legislation did not do, however, was to address the *nature* of this "partnership." In fact, parents and professionals each bring something quite different to the association. Although parents and professionals are complementary and reciprocal partners, they are not identical helpmates. The next three sub-sections explore the complexity of this relationship.

An Asymmetrical Balance

It is probably not surprising that so much anxiety often surrounds individualized family service planning. Embedded in the requirement for IFSPs lurks a set of unacknowledged and somewhat unrealistic factors confounding parents and professionals at this point in time. These factors are interrelated. The first is that parents and professionals are equal—they are not. The "we-are-equal" stance ignores the tensions built into any relationship between people whose perspectives, roles, and power differ greatly, even when they are working toward a common goal. The second confounding factor is that the professionals in this field come from many different professional traditions and orientations, with differing views and levels of preparation for work with parents. The third confounder flows from the silent expectation that all parent/professional partnerships should be identical; that is, professionals should work with all parents in similar ways.

These factors ignore the fact that the range of parents who have a child with regulatory, communication, and/or relationship challenges is as diverse as any "group" could be. Actually, they are not a group at all, but rather individuals or couples with greatly varying circumstances, capacities, and even children. Yet many disciplines have little or no training that focuses on work with parents in general, let alone on recognizing their differences and individualizing the work. Other disciplines emphasize some aspects of parent work (such as psychotherapy) at the expense of others (such as home-based intervention or learning how to play resourcefully with their challenging child). Many programs offer little or no in-service training to support their staff in this critical area. It is not surprising, then, that many professionals report "flying by the seat of their pants" and feeling deeply awkward about the manifest expectation for "partnership" dictated by IFSPs. In this, they sense at the outset that it is not possible to partner everyone the same way, and that it is overly simplistic to "partner" people who may also see themselves as stakeholders, consumers, advocates, or clients.

Mental health professionals may know more than others about how to navigate through the levels and complexities of "many hat" work with adults. Yet individual parents and family advocates are sometimes wary of this group of professionals. They are concerned that these practitioners are likely to treat parents of children with challenges as though the *parents* have an emotional or mental disorder. They maintain, quite rightly, that

having a child with a disability does not imply that the parents, or the family, is compromised.

Still, it is clear that any family whose child has severe difficulties in relating and communicating is living with significant stressors, perhaps particularly when they are in the process of discovery and decision making. Beyond that, there are many circumstances in family life, such as the birth of a baby, a move from one home to another, or parental unemployment, that must be considered and thoughtfully factored into the ways of working with that family. Marital strains are common in families with young children and are more likely when a child has unusual difficulties. Enduring factors, such as parents' personalities and their relationships with their families of origin, also need to be considered in order for intervention to be appropriately subtle, rich, and responsive (see Box 1, shown later in this chapter). Just as recognizing individual differences among children improves intervention, appreciating the individual differences among parents also immeasurably enriches clinical work. IFSPs should be just that: Individualized—and responsive to the *parents'* needs, strengths, challenges, *and* preferences, not just to their child's.

Shifting Leadership

Parents sometimes feel that professionals hold all the power while, paradoxically, professionals often feel the converse. In our society, ultimate responsibility for child-rearing decisions rests with parents.

Still, parents of children with challenges often rely on professionals when making nitty-gritty decisions and in developing day-to-day care. When trust develops, power is shared—a relief to both sides. It is useful to recognize the shifting nature of leadership in robust, trusting parent-professional partnerships. Sometimes parents are in the lead, as when they decide to select a program, take their child out of a treatment program for a vacation, or hire an auxiliary practitioner. Sometimes, the professional is (temporarily) in the lead, as when she coaches parents in play skills, helps them set limits with their child, assists with a referral to a new therapist or program, or uses her general knowledge of development as a framework for helping the parents know what is realistic to expect from any young child. For example, first-time parents whose child has severe difficulties in relating and communicating may be relieved to learn that some of their child's challenging behavior is "normal." The professional might offer guidance in setting limits when a toddler is tired, saying, "No child Benny's age could be expected to stop by himself. All young children need help pulling away from activities, especially when they are wound up. One boy I know simmers down when you pick him up decisively but soothingly. How about trying that with Ben when he gets overtired?" Professionals (and parents) can learn to lead and follow, follow and lead.

Most professionals regard the care of a child as a precious trust. They base their recommendations on deep emotional concern for the child's wellbeing as well as on observations and overall experience. They may become especially aware of their feelings when they find themselves in disagreement with parents about the care of the child.

Embracing the perspective of each parent while also recognizing her own, the reflective practitioner can usually facilitate the making of rich, nuanced decisions by consensus. In the case of a hyperactive, driven boy, for instance, suppose that one parent wants to try dietary alterations, the other thinks applied behavioral analysis (ABA) would be best, while the therapist, based on her experiences with other, similar children, is convinced that the child would improve with medication.

Thoughtful discussions with each participant respecting the other's perspective, could yield a prioritized plan, one that would systematically and quickly get further information about each option while also beginning a trial of the safest, least invasive alternative first, all with the goal of identifying the best fit for the particular child at this time.

The professional's role as a partner with parents is best attained by:

- *Realizing that it is the professional who sets the tone for collaboration*, especially at the beginning.
- *Meeting parents with respect*.
- *Welcoming parents into the program* and encouraging them to participate in decisions about their children's care (Bredekamp and Copple, 1997).
- *Establishing frequent, open, yet tactful and supportive, two-way communication with parents.*
- *Studying and understanding the parent's own personality, historical and current context and developmental factors* (discussed later in this chapter).
- *Offering an individualized program to parents*, based on their particular needs.
- *Seeing the parent-child and parent-therapist relationship as units of observation, assessment, and intervention*.
- *Becoming self-aware by recognizing and taking responsibility for their own emotions and predilections.*
- *Discovering flexibility and responsivity in the relationships with parents and child* at both staff and programmatic levels.
- *Holding mixed identifications or "co-identifications"* with *both* child and parent(s).
- *Recognizing the power of parallel process* (that is, for example, realizing that to join parents and support *their* intent almost always strengthens the parents' ability to do the same for their child).
- *Noticing implicit parental concerns and clarifying the scope and agenda of the work together so that it may shift and deepen over time.*
- *Openly negotiating differences of opinion,* using clear guidelines to agree about setting priorities, and making decisions about what to try first, next, and so forth.

When professionals can meet these challenges, they will very rarely, if ever, feel thwarted by parents. Parental "resistance" is bypassed when therapists stay with, and build shared attention around, the parents' intent. The result builds an alliance through which an open, collaborative learning process moves the parent, the practitioner, and the team forward.

Teamwork

Teamwork is a critical, if grossly underestimated, element of service from the point of view of the child's integration. Some programs function as though a team is automatically a team because it is made up of people who are assigned to the same case. Parents, however, may find themselves caught between appointments and competing priorities, often carrying the burden of ferrying messages back and forth between practitioners. In some home-based programs, practitioners have never even met each other. Growth-promoting team development does not just happen—it requires attention and cultivation. Before several practitioners, each of whom comes from another professional tradition, join cooperatively together as a *team* with deeply understood, shared goals for particular children and families, they must:

- Have regularly occurring times to talk.
- Describe, view videotapes or watch each other's practice, then think and talk together some more.

- Become dedicated to cross-fertilization and collaborative learning, building insight and generic knowledge from each discipline's perspective.
- Become ready to utilize observation and knowledge coming from another perspective within their *own* work with child and family.

Other purposes of team meetings include:

- Supporting parents as they plan, distinguish between, select, and advocate for various approaches and programs.
- Individualizing work with parents and getting clear on roles vis-a-vis parents.
- Promoting integration of parent and child work.
- Collaborating on timing: The team should help to answer "When do you do what, and how do you decide?"
- Quickly studying what is occurring and intervening deliberately when a child plateaus or begins to lose ground.
- To share what does and does not work with the child and family in an effort to speed the child's learning curve and foster progress.
- Shifting practice as the child improves, amplifying alternative approaches, or finishing up one approach/modality or another and moving on.

Center-based programs lend themselves most easily to collaboration because everyone working with a child and family is in one place and knows each other. But whether the treatment is center-based, home-based, practitioner's office-based, or some mixture of these elements, frequent 1- to 2-hour meeting times are key to practitioners becoming a team. Furthermore, only a rich, multifaceted approach based on birth-to-three developmental knowledge and staffing patterns will serve the variety and complexity of families and children who seek early intervention services for young and older children with special needs. An interdisciplinary group of birth-to-three leaders working closely together over time to identify best practices across disciplines identified four requisites to acceptable practice: (1) a framework of concepts common to all disciplines, (2) ongoing observation, (3) reflective supervision, and (4) collegiality (Fenichel & Eggbeer, 1990). These considerations, carried through with respect, allow difficult concerns to emerge and receive the best of shared thinking.

Teams and Parents

Teams should include parents if they want to be involved. However, parents are not simply another discipline on a team, similar to an occupational therapist or a social worker. They were neither trained for their job nor did they ask for this type of assignment. Yet parents, by definition, have the most at stake. For them, this is a lifetime commitment, a life-long endeavor grounded in their love for their child and their dreams for their family. Furthermore, because what happens to their child in his relationship with them and in their home are, in critical ways, the most significant elements of any treatment approach, shared consideration of their participation in the team's work must be active and ongoing. It may shift, ebb, and flow depending on circumstances, their propensities and personalities, and team needs. The critical element is that their participation is discussed periodically in an atmosphere of open communication.

This can get sticky for practitioners when they need to work through disagreements with each other or when they feel the need to discuss the parents themselves and their own reactions to them. Practitioners realize that parents may be partners, but they are not

exactly colleagues. In fact, parents are *both* partners and, to varying degrees, clients, at least in the sense that what they had been doing for their particular child was not all that he needed. Sometimes, other jointly identified purposes may emerge for which the parent wants or needs assistance. But whatever the needs and strengths of parents, they are the experts on the history, minutiae, and emotional flavor that make up their child's day-to-day life. Their critical role and knowledge of their child cannot be overexaggerated; they are the experts in areas at least as salient as any that the professionals represent. When treated with abiding respect and empathy, most parents accept—even welcome—that the team will sometimes meet without them present, particularly when they feel secure that private aspects of their own lives and histories will not be shared and that they will hear the highlights of the team's deliberations and have ample opportunities to integrate their views.

In any case, parents should have regular and frequent access to all the interventionists who work with their child. But they also need an integrative, overarching person for themselves, someone with whom to build a more intimate relationship over time, for the purposes of working with and through their emotions about the specific interactive capacities needed to best reach their child. They need this

– for their child,
– for their own identity development as parents, and
– for the *relationship* with their child and with other key people in their lives, relationships that may be buffeted by the stresses and demands of the child and his special needs.

Often, this special professional for parents becomes the team leader, the convener, and the central organizer of all the people who work with the child, the person who helps everyone concentrate on the particular profile of the child in the context of his parents' developmental and relational capacities. Since home activity and relationship-building is a critical, though sometimes neglected, aspect of the child's treatment, this person is the one who helps the parents and the professional team organize and carry through a rich, home-based program no matter what center-based services he receives, no matter the age of the child.

The following example demonstrates what can begin to happen in terms of team development when practitioners working with the same child begin to meet together, facilitated by a leader who tries to think across disciplines.

Dale Shipley (age 4) was just turning 21 months old when his parents sought a Developmental, Individual Difference, Relationship-based (DIR) mental health consultation.[iv] He was a sweet, low-tone child, who was just beginning to walk and say single words. Born 7 weeks premature and at a low birth weight, Dale was identified for early intervention during follow-up when he was 7 months old because he was not progessing adequately. He had been receiving an intensive, mostly home-based program since then. Greg and Gail, his parents, are serious-minded, devoted parents who have focused their efforts on constructing a full program for him. They struggled with feelings of depression and guilt.

Gail and Greg were particularly concerned about Dale's apparent lack of curiosity; he did not investigate by taking things out of drawers or closet floors, for example. They also questioned about how to set limits, because Dale sometimes hit them when they restricted him or, more often, just limply acquiesced. A question emerged following the DIR therapist's observational home visit

about moving Dale out of W-sitting, as the parents had been instructed to do by his occupational and physical therapists (OT and PT), without discussion of alternatives. However, as soon as Dale legs were moved, his play was disrupted because poor pelvic control compromised the use of his upper body.

The Shipley's also felt unsure about how to play with him, were upset at being asked to leave his intervention sessions more often than before, and raised questions about one physical therapist, who insisted that Dale be held in place as she worked on his lower trunk and legs. Indeed, the parents had argued painfully with each other over this latter practice. They had taken him to a physical therapy session together, and the therapist asked that they hold Dale in place while she worked on his legs. Dale objected, but the father held fast despite his crying. The mother, who had endured many medical procedures herself as a child, felt frantic watching this and finally demanded that they stop, which they did. She was furious with her husband for having gone along with the therapist. In retrospect, he also felt badly about the incident and had questions about the therapist's approach.

Although some of the professionals had been working with Dale for just over a year, no meeting between them had yet been held. The first team meeting—organized by Gail and held at the DIR psychotherapist's suggestion—began with each practitioner describing what he or she was doing with Dale. Many questions coming from a general developmental, relational perspective were raised by the DIR therapist about what was being said. As the meeting progressed, discussion became increasingly animated and elaborated. This was a good sign, the first step toward building a team.

One topic of concern to all was Dale's attention span. His attention to one activity usually lasted for only 1 or 2 minutes, and his play often consisted of taking out each item in a box, holding it up for the adult to label, and then with an "aw-ga" ("all gone"), putting everything back in the box, shutting it, and putting it away. Given the fact that Dale tended to be distractible, several of the therapists mentioned that they were asking him to put each thing away before going on to the next activity. What had not been thought about prior to the meeting was the fact that Dale was not going far enough with the playthings that he did use. Although putting toys away before going on to the next thing might reduce his distractibility, there might be other approaches that could accomplish the same objective, such as having a more affectively lively interchange about whatever he played with or did. Furthermore, putting one thing away before taking out another would seem to constrict Dale's chances to discover that islands of interest could be linked one to another. For example, if the people figures were put away before the blocks were taken out, then the idea that he could use people figures *with* blocks by, for example, using a block as a bed, would be less likely to occur to him later down the developmental line.

The goal of this first meeting was to facilitate a good discussion, such as that just described. Talk that gets questions of concern onto the table and engages everyone reflectively begins to build knowledge about each other's thinking and, eventually, trust. There was so much to talk about that everyone agreed to meet again in 3 weeks, although some team members had been reluctant to put aside the time to meet the first time. The newly forming team also thought it was important to raise the possibility with Greg and Gail of meeting occasionally without them so that the practitioners could openly discuss their views about parental presence in Dale's sessions. They agreed that the notes taken by the DIR therapist on questions

raised (Figure 1) would be distributed at the next meeting for further discussion, and additional questions could be integrated later on as well. The ability to accept and tolerate a certain tension inherent in different viewpoints emerging is key to teambuilding.

A constituency in the field of disabilities believes that professional *training* should be available to parents. Having parents as active participants in their child's treatment is, in fact, an apprenticeship of sorts. Some parents find their calling in the process and may flourish as advocates, support group leaders or, if they already work in an allied field such as speech/language, pediatrics or psychology, may turn their practice toward early intervention work. For them, their passionate, new sub-specialty becomes a gift of enhanced meaning and commitment given to them by their child. Parents should certainly be invited and encouraged to read widely, to attend conferences, courses, and even training programs, if they wish. Yet care needs to be taken not to press parents to do things that demoralize them or are simply too much. The most essential element of staff training is case discussion. Similarly, regular and frequent discussion of their child, their interactions with him, and their sense of their own participation is the crucial element of work with parents, always in the context of their own capacities, inclinations, and needs.

CHILD ASSESSMENT AND INTERVENTION CONVEYS MEANING TO PARENTS

Parents bring their child to a professional for expert advice. The professional's demeanor, words, and emphasis have a huge impact on how they feel and what they will do with and for their child. *The assessment of a child is always an intervention for his parents.* How parents come to define what is hindering the appropriate unfolding of their child's development has great impact upon how they handle him and how they feel when they interact with him. In turn, these qualitative differences in parents' behavior and emotions influence how their child responds. This is true even for children who are very difficult to engage. Therefore, *how parents understand their child's problem is crucial* to the eventual outcome. Once parents understand their child's particular profile and absorb more about how to reach him, they can once again regain their rightful and powerful position as the central organizing agents on his behalf. Reaching this goal is so critical that it is essential to recognize their own and their child's strengths, even while acknowledging the work that lies ahead for everyone.

However, the initial contacts that most parents have with early intervention personnel are centered on an evaluation of the *child*. Often, in the process, parents (and child) encounter several specialists who offer little feedback, instead of seeing one thoughtful professional who establishes a relationship with them, who guides them through a process that concentrates on expeditiously bringing assistance to their child, and who reaches out to *them* with interest, increasing specificity, clarity, and support.

Establishing Eligibility Within a Mandated Time Period vs. an Integrated Evaluation

Professionals need to bear in mind that establishing eligibility for early intervention services is not the same thing as conducting a complete, integrated evaluation. In many jurisdictions, a child's development must be shown to be below certain norms before the child can qualify for services. As a result, securing the services that a child needs may involve emphasizing his deficiencies. It is crucial to help parents understand this so that the assessment

Figure 1. Notes of Questions Raised at an Actual Team Meeting about a Child with a Mild Regulatory Disorder, Low Tone, and Delayed Motor and Language Development

Team Meeting #1: Dale Shipley **Date:**
Age: 23 months

Present: Greg and Gail Shipley (parents); Jill Roth (PT); Melanie Allen (OT); Michelle Carr (OT); Jill Toniada (speech); Barbara Andrus (speech); Rebecca Shahmoon-Shanok (DIR psychotherapist for parents and child)

Absent: Tina Henderson (PT)

The following major questions were raised during the course of each practitioner's description of her work with Dale:

1. How do each of us learn to integrate aspects of what the others are doing in our own work with Dale such that the demand for integration doesn't fall to him and, secondarily, to his parents?
2. How can we really share what we're doing with him, beyond the general/specific descriptions that each practitioner offers (e.g., observation of each other's work or videotapes)?
3. How can we come to recognize Dale's usual day-to-day capacities, as well as the fleetingly glimpsed next level capacities across developmental lines, so that we can set up his human and physical environment in such a way that he can more readily practice those dawning capacities and come to know himself as that capable person?
4. How can we assist Gail and Greg to really know and practice the approaches and capacities that each therapist offers Dale so that Dale will have as full a home program as possible with the people who are closest to him?
5. How can we work with him best, maximizing his intent (and supporting appropriate social-emotional development), when we recognize that his intent may include, for example, seeking his mother (who is asked to leave) during a particular session?
6. How can we help Dale go deeper and elaborate his play sequences to promote richer and more nuanced discovery, and, gradually, representational play?
7. How can we help Dale attend for longer periods and link islands of interest, one to another?
8. A question was briefly raised about how Dale can support himself to do an activity when he is taken out of or is requested to move from W-sitting. (When requested, Dale usually does straighten out his legs.) Reference was made to his doing activities while kneeling, standing, or sitting on a small chair at table position. There was also an allusion to some sort of back or prop to help position him when he's sitting on the floor, but we didn't get to a clear recommendation yet.

The decision was made to meet again in 3 weeks and that, in the meantime, each of us will try to videotape parts of sessions in order to facilitate our cross-sharing.

Reflections: Questions and thoughts and plans that came to me after the meeting to be discussed with the team:

1. Does Dale cross midline and what can we do to help him develop and hone those capacities?
2. Following Gail's description of Dale watching/studying children going down the slide in the park and his

Continued

Figure 1. *Continued*

ability to then copy them and go down the slide, like them, on his stomach and feet first, the question occurs: "What sensorimotor acts does Dale need to *see* in order to maximize his capacities?" (i.e., it seems like his motor planning is a strength). Bearing in mind that we want to develop *his* intent in this area, not his opposition, how can we take advantage of this developmental capacity?

3. As I contemplated the discussions of the meeting, it dawned on me that, while the OT's and PT's were focused on motor function, perhaps one of the reasons that Dale does not go further with various toys is avoiding or not aware of their sensory properties. He is not exploring: for example, banging them, mouthing them, smelling them, or touching them with various parts of his body. This suggests that he would be assisted by an expansion of *sensory based* play invitations. As has been said, learning is much more than labels, colors, numbers, and days of the week. I think that we should try to develop a very, very rich home-based sensory world for Dale and will explore this with Gail and Greg, as well as with the newly forming team next time.
4. It is important for me to explore with Gail and Greg how they would feel about a meeting of the team without them present.

process does not devastate their capacity to believe in a future for their child.

Professionals must reframe what they have been trained to think of as levels of deficit and instead concentrate on the fleetingly glimpsed, higher developmental levels that the child evidences. It is these fledgling promises that require nourishment. They are what challenged children need their parents to observe and aim for in order to motivate the children into developmentally in-tune interaction, one tiny step at a time.

Thus, the child's behavior and interactions with his most trusted caregiver(s) should form the cornerstone of assessment. Extending the developmental model described in *New Visions for the Developmental Assessment of Infants and Young Children* (Greenspan, Meisels et al., 1996), a growth-promoting assessment of a child will be guided by the following interrelated sequence:

1. *Establish an alliance with parents*, listening to their views of their child's strengths and challenges and discussing the issues to be explored in the assessment.
2. *Within this dawning alliance, obtain a developmental history of the child and a preliminary picture of the family's experience.* The alliance comes first; the details are secondary. Some details may only emerge over time (see Box 1 in a later section in this chapter), as part of an ongoing relationship and working alliance. The key is to be responsive to the needs of the parents' explicit and implicit concerns.
3. *Observe the child in the context of unstructured play with parent(s)* or other familiar caregivers, preferably in a setting familiar to them. Observation of the child with his family can readily be done in conjunction with step 2 above. Most parents are relieved if, after seeing their child, the therapist maintains a positive, strength-based stance within the context of the dawning alliance.
4. *Remember that the parent-child, parent-parent, and parent-therapist relationships are essential units of observation, not just the child.*
5. *If needed, gently coach parents in interactions with the child to help them elicit the child's highest developmental levels.* Once the child has become accustomed to the therapist's presence, the therapist may also try to help the child interact and/or play directly with him. The idea is to glimpse

higher-order, incipient capacities in the child and help parents see how they can mobilize them. This is an intervention-centered assessment (Thomas, Benham, & Guskin, 2000; Shahmoon-Shanok, 2000) that can immediately initiate a significant component of the intervention program.

6. *Call for specific assessments of individual functions in the child only as needed,* within the context of a rationale specific to the particular child and the therapist's relationship with the parents. Similarly, target any medical tests to respond to particular questions.
7. *Be mindful of both explicit and implicit parental needs, concerns, strengths, and challenges,* tactfully articulating and elevating them for shared consideration and treatment planning.
8. Using a developmental model as a framework for integrating the data obtained from parents' reports, direct observation, and any other sources, *discuss findings with parents in the context of the alliance,* with the potential for beginning (or continuing) an intervention program, if needed.

Establishing Eligibility Within a Mandated Time Period vs. Prompt Intervention

In order to secure services for children in a reasonable amount of time, many jurisdictions limit the number of days the assessment phase can take, yet mandate that specific, specialty assessments all take place within the time limit. These simultaneous pressures often result in children and families being impersonally exposed to one assessor after another, each from a different discipline, within a short period of time, sometimes even on the same day. What is sacrificed by this approach is the opportunity to build an *integrated* picture of the *child within his relational context and at his best*. What is all too often simultaneously lost is the opportunity to begin building a generative relationship with his parents. This is unfortunate because such a beginning would likely yield more attuned interactions of parent with child which, in turn, might begin to exercise the child's fledgling relational capacities.

Instead, the assessment phase should be as brief as possible, which is to say that the earlier the treatment program can begin, the better. It is often not necessary to have each discipline's evaluation finished—or even begun—before a *provisional* diagnosis and one or two components of a treatment plan can begin. In fact, a provisional diagnosis for a child with developmental challenges is not difficult to make. It is often possible for an experienced practitioner to offer provisional impressions as well as generative guidance within an extended first or second contact. Thus, an intervention-centered assessment can begin assistance to child and parent almost immediately. The child's responses to the intervention and enhanced parental responsiveness inform next steps and help to clarify the diagnosis.

A word on diagnosis: Driven by considerations of public funding and insurance eligibility as the field is currently, reaching a diagnosis is sometimes reified as an end, as if the label itself would offer answers. In fact, diagnoses *are* critical in medical conditions in which discovering the correct pathological entity is requisite to finding the specific, appropriate treatment. Accurate diagnostic labels for agreed-upon entities are also necessary across cohorts for research to become meaningful. And whenever it is suspected that a child's developmental disorder is part of an active medical condition such as epilepsy, or a genetic abnormality with various risk factors such as tuberous sclerosis, the search for an accurate diagnosis is critical. Nevertheless,

even in such cases the intervention program for the developmental disorder must be specifically informed by abiding scrutiny of the child's developmental, relational, and individualized sensory, motor, and processing profile, and how these shift over time. Since it is those particulars that inform professionals and parents about how to reach and engage the child relationally, they are the key to bringing him into the interactive, communicative, and learning world.

For many young children with developmentally significant functional impairments, the "impairment, in itself, should serve as a criterion for initiating appropriate intervention" (Greenspan & Wieder, Chapter 12). Often, the most significant *initial* interventions will be supportive coaching with parent and child to get shared attention and gestural interaction within their relationship moving, as well as occupational therapy with a heavy, sensory-integration emphasis. The information yielded by those interventions provides a rich picture, which can then direct the selection of further specific assessments. Speech/language and educational approaches can often begin just a little later and be layered in responsively, based on what is being learned about the child, the parent(s), and their relationship.

It is very unfortunate that many jurisdictions currently confuse subspecialty assessments with evaluation per se. They require all such assessments to be completed before treatment can begin and they further insist that only individuals who will *not* be treating the child and the family can assess. This usually tips the process toward a direction in which several different practitioners automatically evaluate the child outside an integrated context of the individual-in-family profile and outside of a supportive relationship-building process with parents. Going straight to specific interventions without attending to the parent or the child-parent relationship either ignores or takes for granted necessary and critical fundamental levels of service. Yet for children with severe multisystem, autistic spectrum disorders, it is those basic levels that need strengthening first and foremost. Only upon a sturdy, substantial foundation can the upper levels be securely built.

Thus, continuity and relationship-building are requisite for thoughtful assessment to become effective intervention (and vice versa). The making of a diagnosis per se can—should—wait until effective intervention has begun to support the child, parents, and the relationship between them. Since labels tend to stick, a diagnostic determination should be made only in a favorable context, through which the child's better levels can be glimpsed. By then, the thoughtful practitioner will have helped parents begin to know their child's particular profile of strengths and challenges. In this context, parents are more likely to experience the diagnosis as a summarizing term rather than as a verdict. When funding considerations require a diagnostic label such as autism to secure services, professionals can acknowledge this with parents and then set out together to disprove it.

When work with a child and family *must* be limited to assessment, professionals should put forth every effort to make personal and meaningful their introduction to the family of the intervention program or practitioner. This step, so hard to achieve in these times of overlarge caseloads, involves both assessors and intervenors. Recognizing how difficult a transition from one to the other may be for parents may inspire professionals to sustain their efforts to achieve such connections.

Setting the Tone of Partnership

Whether work with the child and family continues from the assessment phase through intervention or not, it is critical to bear in

mind that from the very first contact, each professional's observations, ways of listening, ways of coaching, and ways of explaining the child's difficulty make a difference for families who are likely to be groping for some sense of an unfolding future for their child. Given parental anxiety during initial contacts, it is the professionals who set the tone for how they will work together. By acknowledging relative strengths, by discerning points of contact with their child (fragile as those may be), and by concentrating on next developmental steps, a growth-promoting partnership, and intervention plans, a practitioner—in any discipline—can offer some promise of a working future to parents and, through them, to their child.

Also during the initial phases of contact, the relationship potential between the professional and the parents on behalf of the child mandates consideration. Too frequently, this is given only passing attention in either the assessment or intervention phases of work with a family. Sometimes it is not even formally noted or discussed unless or until it becomes problematic. But, especially for children who struggle with developmental challenges, how the adults involved feel and think about each other is of significance to both the treatment process and the outcome. Not only should this potential be carefully considered but the *development of mutual respect and trust between parents and practitioner needs to be placed as a highest priority, equal in stature, even during the assessment phase, to assessment and diagnosis.* With most parents, the practitioner can openly discuss the potential for a relationship between them as a way of understanding more about parental expectations, preferences, and needs and also as concrete evidence that the practitioner and parents are forming a partnership and open exchange on behalf of the child.

For the mother or father of a child with special needs to function competently on behalf of their child, each parent must become open to utilizing professional resources for their child, for her- or himself, and sometimes for the family, while simultaneously experiencing the centrality of her or his position for the child. When professionals recognize this dual challenge, it becomes obvious that they have a fundamental responsibility to support these capacities over time. In order to fulfill this responsibility, reflective professionals will want to understand each *particular* parent within his or her unique developmental-relational-communal context.

A generative question that practitioners can ask themselves is, "How is this set of experiences *marking* this mother, this father, this family?" Having a child with special needs is a process that marks parents either for better or worse in terms of their sense of themselves and their capacities to be resourceful and relationally aware. When this question is pursued openly and empathetically, the vast majority of parents are responsive to—and deeply appreciative of—the care being offered. Parents want—even need—to be heard, understood, and treated with respect: They need their professional partner to recognize what the challenge of this child is like for them in the context of their life at this point in time.

When professionals manifest this basic investment while they help parents to see what *they*, as parents, can do for and with their child, when they are able to support parents' search for ways to meet and become resourceful in dealing with their challenging child, then they support parents in their search for their better selves in the face of enormous challenge. In this way, parents feel partnered and can work with the professionals to build and pursue the next therapeutic steps for their child. Furthermore, when professionals find this individualized

footing, they find it easier to frame recommendations in the specialized, responsive ways that particular parents can understand and appreciate. Finally, when professionals reach out with the empathic interest described, they become able to discover which of the many parents are able to function optimally on behalf of their children with ongoing professional collaboration, and which parents may need additional, specialized interventions themselves.

In order to accomplish this kind of meaningful, individual- and couple-specific partnership, one professional should become the overall, responsive, resource-coordinator-integrator for parents and child. That key practitioner should work closely with parents to help them prioritize and build the intervention program their child needs as well as the supports they need to function optimally. Naturally, needs change over time, and as the key practitioner works closely with the parents, he learns how to respond resourcefully to shifts in their and/or their child's organization. The section that follows addresses some of the generic *content* knowledge necessary for any practitioner working with parents of young children with special needs. In order to learn how to work in these enhanced ways, *process* knowledge needs to be cultivated by practitioners through on-the-job reflective practice (cf. Fenichel & Eggbeer, 1990; Gilkerson et al., 1995; Gilkerson & Shahmoon-Shanok, 2000; Shanok; 1992, Shanok & Gilkerson et al., 1995).

ESTABLISHING AND MAINTAINING RELATIONSHIPS WITH DIVERSE PARENTS

As a rainbow of researchers, theoreticians, and poets have observed, "The child resides within the (hu)man." Thus, what has been learned about children's development and about how to build relationships with them can also be applied to work with adults (cf. Greenspan, 1997b; Greenspan & Wieder, 1987). Understanding and using developmental perspectives with parents enriches the practitioner's potential with them.

In work with all parents and children, there are many intertwining and parallel relational factors. Prominent among them are:

- The development of the person/parent within his or her relationship with the child
- The emergence of recollections, attitudes, and patterns, conscious and unconscious, from the parent's own early experience (Benedek, 1959; 1995b; Seligman & Shanok, 1995a; 1996; Shanok, 1987; 1993), sometimes called "internal representations," or "transference," or "internal working model" when these emerge in a current relationship
- The development of the person/parent within his or her evolving relationship with the professional.

Furthermore, there are stages to the development of any relationship (cf. Greenspan & Wieder, 1984), and developmental levels predominating within any individual. Each relationship can, itself, become a unit of observation, care, and growth. Indeed, relational forces are all in dynamic, cogwheeling relationship with one another; any influence on one constituent force affects the others. Looked at in this way, the idea that a parent's relationship with the professional can have significant influence on the parent and on the unfolding parent/child relationship may be glimpsed. Parents need *individualized* consideration and planning, simply because each one has a different history and set of perceptions, as well as widely varying abilities, sensitivities, and transferences to both child and professional.

Thus, not only do parents vary, but their children are also very different from each other,

even if their "diagnosis" is the same. Furthermore, parental abilities to work with others in handling such an intimate responsibility vary widely. Just as "child-centered" intervention is now recognized as insufficient, so, too, "family-centered" intervention that only provides support, information, and guidance about their child's developmental needs is not enough. Even a two-or-three-size-fits-all programmatic approach cannot make the most of relational opportunities. Rather, responsive work, which begins and continues where *both* the parents *and* the child "are," is far more likely to support and mobilize the range of different parents on behalf of, and at least equally important, *with* their child.

Reaching the "Hard-to-Reach"

Parents of children with developmental disorders are as widely diverse a lot as the general population. They meet us with varying degrees of relational and communicative capacities themselves and with very different internal and contextual resources. It stands to reason that a segment of them would be hard to reach for a vast array of reasons. The idea of "holding so that others can hold" or "nurturing the nurturer" is considered fundamental to all work with parents of very young children (cf. Bronfenbrenner, 1979). It is perhaps even more critical in work with any parents whose child has severe difficulties in relating and communicating and who, for whatever reasons, are having difficulties engaging either with their child or with the team. This is especially true early on in intervention, before their child begins to consistently give back reassuring, interrelated feedback.

Depending on their capacities and preferences, avoidant parents should be offered regular contacts in their home, office, coffee shop, or on the phone—anything that works for them. They require time they can count on with an empathetic, deeply interested, optimistic and (occasionally, when crucially important) authoritative professional, time in which the entire focus can be on them and their child. Strength-centeredness and acceptance of such parents are key.

The knowledge and practice base emerging from community-based outreach work must be integrated into early intervention. Practitioners need to support one another when they find themselves feeling that they are selling something that the parents do not know they need, let alone want. Responsive creativity also can make the margin of difference in reaching a parent or not. In one project with very poor teenage moms and their challenging children, the "way in" to reluctant parenthood was through a support group that got off the ground with a focus on hair styling. As the young women fixed each other's hair, conversation drifted (and was *then* facilitated by the professional) to their children.

This parallels what children with difficulties in relating and communicating need from their parents. And again, it mirrors what some parents need from their program or practitioner. Consider another example: The director of an early intervention program serving young foster care children and their families brought the following topic for discussion to a professional seminar on leadership. Her agency a school-based program for young children with developmental challenges, invited biological parents to observe and participate in their children's classrooms on a daily basis. But, because the teenage mothers were very disruptive—talking among themselves, chewing gum loudly, moving around the room but not paying attention to the children, and going in and out of the room "just to have a cigarette"—she and her staff felt that they had to set strict limits on the times during which the young mothers could visit their children's classrooms. Using the leadership seminar discussion as a way to step back and reflect, the director was quickly

able to see that, while she and her staff had wanted to be inviting and helpful to the biological parents by setting an open-door policy, they had been so focused on services *to the children* that they had ignored the needs of the biological parents who, by definition, are parents with challenges. The parent's negative expectations of relationships, based in all likelihood on powerful past experiences, made them skittish and, paradoxically, invited rejection, the opposite of what they needed. The program would have to find a way to build trust, to violate these young parents negative, anxiety-ridden expectations to succeed in constructive outreach.

After much shared discussion with her staff, they decided to offer a support group to the parents, complete with food and beverages, every day just prior to their entry into the children's classrooms. They reasoned that, if they attended to the parents, then perhaps the parents could better pay attention to their children, and indeed, the support group did the trick: It transformed these needy parents' behaviors such that many were able to participate and observe more appropriately in the classroom. In addition, within 2 or 3 months of support group attendance, several parents became more involved and asked for individual appointments "for themselves."

Just as adults naturally modify their approach to fit particular children, professionals must become thoughtful about how to approach parents, always aware that, inadvertently, they may put parents off. A good rule of thumb is that when parents do not show up or if they "behave badly," it is time to step back and reflect upon practice with resourceful colleagues. Parents' "lack of interest" or problematic attitude almost always conveys something about how the program is not yet connecting with them. Growth-promoting work with parents flows from *their* needs and concerns, from where *their* initiative is activated. Shared observations and then shared views develop over time. Working toward an alliance that has pleasurable components and can survive negative feelings is critical to long-term partnerships.

Co-identifications, Time, and Reflection

More than other types of psychotherapy or even child guidance work, this work is, in fact, child-centered. This point may seem to contradict the call for sensitive, relationally alive work with parents fueled by recognition of their many individual differences. There is a tension between children's and parents' needs, to be sure. But a young child's threatened development is in no small measure experienced as a threat to the parent's own sense of self; it provides a major impetus for parents to place the child's needs above their own, as if the child's needs *were* their own. "Best practice" requires that professionals not only evade the "contradiction" but also recognize and even embrace the tension inherent in identifying with each family member and in building family-specific relationships. What is good for children is good for their parents. What is good for parents is good for their children. Aiming for both stimulates good outcomes. The invisible but powerful thread is relationship.

All small children are a far more constant responsibility than could be imagined before they arrive, and children with special needs require far, far more than their typically developing peers. The level of demand on parents can be excruciating. Professionals need to be mindful of how overwhelming the task demands can be for parents with children with severe difficulties in relating and communicating.

Becoming fully engaged with a family requires time—time for the professional to become saturated with observations, details,

and nuances about the child *and his relational context*. Especially in the first several stages of assessment and intervention, parents and children with severe difficulties relating and communicating should be seen *together*. This enables the professional to focus on the current strengths of the parent-child relationship, on how to help their relationship and communication become more lively and resourceful, and on how to enable the parents' own interactions with their child to support and extend whatever treatment is recommended.

It is also essential to see parents without their child regularly, predictably, and often enough to exchange information and develop shared perceptions, to reflect, to take stock, and to plan. Just as with children, parents need a supportive context. Not infrequently, the support that anxious or depleted parents experience in their own sessions liberates them to return to their child refueled. Sometimes, the sessions may involve talking about mutual frustrations with uneven or inadequate service systems. At other times, a parent may need to sort out memories and child-directed impulses based on the past. Or, parents may need to sort out subjective feelings of discouragement in the light of more encouraging objective reality. That is, sometimes parents may feel that they are not accomplishing enough and worry about the future. If the professional recognizes that they are, in fact, doing a great deal and that the child's developmental trajectory has already "taken off," then she can offer much-needed reassurance.

Guidance and coaching must be based on specific observations and interactions between parent and child, that the parent and the professional have witnessed together. Most parents and key caregivers are highly motivated: With sensitive, developmentally geared assistance, they can learn to observe, read, and respond to their child contingently, drawing their child into the relational, learning world.

Working with parents and children together and then reflecting with parents regularly without the child present allows the professional and parents to build a durable, insightful, resourceful relationship. Allowing time for sharing and thinking together makes for a partnership that can withstand differences and navigate through uncharted waters.

TOWARDS DEVELOPMENTALLY APPROPRIATE PRACTICE: APPLYING THE CONCEPTS OF RELATIONSHIP, INDIVIDUAL DIFFERENCE, AND DEVELOPMENT TO *PARENTS*

At the beginning of the 1900s, theorists such as Sigmund Freud, George Herbert Mead, and Harry Stack Sullivan began to recognize that personality—enduring ways of behaving, perceiving, and thinking about oneself and others—arises through early social interactions, beginning with the first relationships in earliest childhood. The patterns of those mutually regulated (or disregulated) early encounters (cf. Schore, 1994; Tronick, 1998) become the largely subconscious template through which current attitudes, interactions, behaviors, and expectations are governed. Over time, practitioners can recognize a parent's particular patterns and often find ways of acknowledging them. These patterns become the basis upon which the practitioner and parent come to set, and shift, their agenda or contract with each other. It is helpful to become aware of each parent's:

- Strengths and risk factors.
- Developmental levels and internal representations.

- Social capacities, especially vis-à-vis the child; that is, the effect of this child on the parent now and the effect of each treatment resource for the child on the parent.

Knowledge and familiarity build a shared and sympathetic perspective between practitioner and parent, and boosts the likelihood that a practitioner will understand a parent's predilections and hesitations. Yet, whereas many parents readily respond with openness and trust, others take time to build the trust that comes before openness. Pulling together impressions of a parent's individual style, her developmental and relational level and capacities offers the reward of increasingly targeted practice. All practicioners serving a child should have general familiarity with these parental factors, while one person will hold major responsibility for seeing them regularly, and understanding and connecting with them.

Most parents will readily reveal personal details when they feel the interest of the professional and trust her intent. For *each* parent, information learned can be aggregated and organized, as shown in Box 1. This box includes important areas to notice and what to inquire of parents. This information usually becomes available in the course of meaningful discussions with parents over time. With this rich and nuanced picture in hand, developmentally appropriate interventions for parents can be planned. To accomplish this, programs and professionals must move toward providing interventions for *parents* based on their individual capacities and styles.

Unfortunately, in many programs, no one professional is designated to be "the parent person" for a particular family. All too often, even when there is such a designee, resources and knowledge to support more individualized work with parents are slim. Critical needs of both child and parent tend to be ignored.

Figure 2 compares intervention pyramids for both children with special needs and their parents. Although parents are requisite at every level of the Intervention Pyramid for Children, current evaluation and service programs nevertheless tend to cluster their offerings exclusively around specific interventions for the child; that is, they congregate at the uppermost section even of the child pyramid. By definition, the child's foundational levels remain weak and uneven while the engagement and intimacy the child desperately needs from the parents to build mutual regulation and repair (Tronick, 1986) are neglected.

As can be seen in the Intervention Pyramid for Parents, there are similar developmental and relational considerations for adults; in fact, they have striking parallels. Yet, most often, oferrings for parents in early intervention programs are add-ons, not the developmentally based, comprehensive, integrated layers required. When working appropriately, each of the four levels of interventive support within each pyramid would be seamlessly interwoven, with the basic levels providing the ongoing foundation for the others. Just as children need additional supports at the basic levels, so do many parents, given their levels of stress and/or their own pre-existing vulnerabilities.

When individual guidance or group support sessions are offered to parents in most early intervention programs, they are offered as program components rather than as an individualized, responsive, and tailor-made plan. How can these programs provide something meaningful enough—verbally and generally—about interactions that are preverbal, gestural, and specific? What is needed for contact to be effective is knowledge of each parent's individual functional developmental capacities, including their educational, social, economic, and cultural resources (as shown in Figure 2) as well as the specific, developmentally and relationally targeted needs of their

Box 1. Organization of Family Information[1]

- **History**
  - Where, when, and with whom did the parent grow up
  - Cultural beliefs, customs, aspirations, and support systems
  - Educational level and experience of self at school
  - Socioeconomic factors
  - How do they characterize their key relationships and memories of
    - Parents • Grandparents • Siblings
    - Is there a psychiatric history/oddness on either side of the family?
  - Work history
  - Impressions of *how* each parent tells life story (e.g., continuities, coherence, gaps, confusions, affect)
  - Circumstances of conception, pregancy, and birth
  - For whom was the designated child named? Does child remind the parent of anyone?

- **Current situation**
  - Housing
    - With whom they live
  - Current work situation
  - Financial resources, challenges, and attitudes
  - Familial/marital strengths and stressors
  - Descriptions and ages of other children
  - Next of kin and extended family—strengths and stressors
  - Social network-friendship base
  - Spiritual beliefs and practices
  - Attitudes toward and subjective experience of each key person in their lives, especially the designated child
  - Where is this parent in the emotional and adaptive process of encountering the child's significant challenges?
  - How does each parent respond to/feel about various symptoms and strengths of the child?
  - Cogwheeling between developmental needs of various family members
  - Does this parent (or other of their family of origin members) report over- or under- responsivity to stimuli? That is, what is this parent's sensory profile?

- **Impressions**
  - Where is this parent developmentally?
  - What distinguishes this parent from others? What are his/her strengths, vulnerabilities, particularities and life view?
  - Where is this parent relationally
    - In general? • With child? • With spouse? • With key practitioner?
    - What do we know about this parents internal representations and inner life?
  - Coherence, confusion, and gaps in this parent's narrative (cf. Main, 1993; Main & Goldwyn, 1984)
  - Summarize your impressions of the child as a marker experience for this parent in the context of other resources and stresses in his/her life

[1]**This outline is not meant to be a semistructured interview**. Instead, it is a series of sections with which to sort, aggregate, and organize information gathered over time about *each* parent. (Other sections may be added to the outline for additional information about particular parents and their families.)

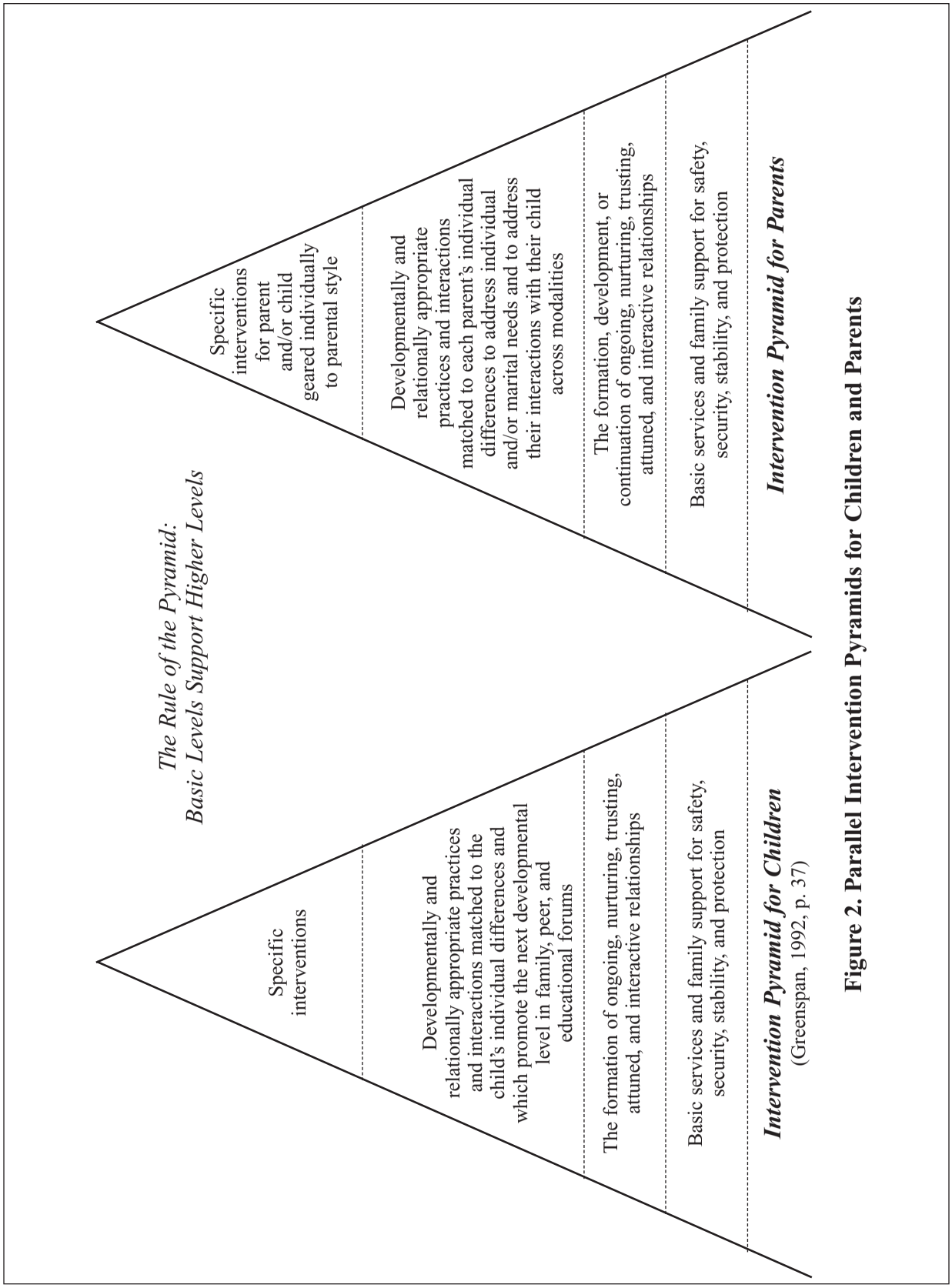

Figure 2. Parallel Intervention Pyramids for Children and Parents
(Greenspan, 1992, p. 37)

child. It is these factors that should drive the *plan* (i.e., the type and frequency of interventions) for each parent and for parent(s) and child together.

In situations when either the parent her- or himself has challenges, intervening developmentally with a parent can make a margin of difference for parent and child. As was said at a recent conference, "Where the patient (in this case, parent) is evidencing significant deficit in any of the developmental levels, we must engage and challenge the (parent) at the earliest level of deficit and make that level the primary focus of treatment until that level is mastered. Then the next level is addressed and so on. Obviously, addressing one level does not mean that other higher levels of development are not engaged at the same time—it is a matter of emphasis. In other words, successful (developmental) psychotherapy addresses and remediates developmental deficits in a systematic and progressive manner" (Mann, November 1999).

Figure 3 illustrates developmental levels in the therapeutic process with parents. A relationally oriented mental health professional may be critical in moving parents up the developmental ladder.

Resources That Should be Available to Parents/Caregivers

Parents are society's agents for the care and raising of its young. Yet parents are a widely differing bunch, with diverse histories, profiles, resources, and needs. As they care for their children, parents must have choices in order to discover what will work for their child and their family. Parents of children with special needs also require choices. In fact, with greater demands placed upon them compared with those on parents of typically developing children, they need more choices, as well as a more responsive communal infrastructure surrounding them than do others. And, for those who arrive at the therapist's door not fully knowing what could be helpful to them, parents also benefit from personally tailored supports and information so that they may become active participants in what they receive. Along complementary lines, professionals require an array of selections with which to constructively buoy the parents with whom they work. The interventions offered must be based on individual differences in the parents' surrounding ecological matrix and on their functional-developmental-relational capacities.

Integral to the intervention pyramid for parents is the recognition that *basic levels support next higher levels, and that each family must be fully considered level by level in order to help them help their children.* This requires that the field of early intervention move toward a state-of-the-art interweaving of supportive and, sometimes, insight-oriented psychotherapy, as well as experientially based adult education. Bearing in mind the developmental level and ecological context of each parent, programs and practitioners must consider each level on the comprehensive continuum of services (see the right side of Figure 4) necessary to reach parents and determine at what level to focus the interventions. The continuum begins with the most disadvantaged, wary, or preoccupied parents.

"Difficult" Parent or Child-Centered Program?

The reasons for which parents come to be considered difficult or disinterested by practitioners fall into three major categories: their own histories-profiles, an inadequate or otherwise mismatched response to parental needs by practitioners-program, or some mix of the two. Some parents, for reasons stemming from their own histories and/or reactivi-

Ladder of Functional Developmental Levels	Regularity and Stability	Attachment	Process
VI. Emotional thinking			• New patterns become more solid; can start to separate from the therapist without losing new patterns in spite of sadness • Can understand how her maladaptive patterns interfere and can make changes
V. Emotional ideas		• Comfort with being known, with good and bad aspects exposed	• Can see patterns in many different contexts and can see how present patterns developed out of past relationships • Can talk about still more complex patterns of feeling and behaving in relationships
IV. Complex communication		• Communicates difficult emotions • Uses relationship to communicate, not just to get needs met	• Self observing function in relation to more complex feelings, including contradictory feelings such as anger and love • Self-observing function—not only of behaviors, but also feelings • Can focus on the relationships in which these behaviors take place
III. Two-way communication	• Comes regularly • Misses some sessions, but returns • Makes it to some appointments	• Emotional interest in, attaches to therapist as a unique individual	• Beginning to report on patterns of behavior, but no understanding of reasons
II. Intimacy/ attachment/ relationship	• Comes to center • Acceptance of visits	• Tolerates therapist	• Can communicate some things, such as needs and wants
I. Self-regulation and interest in the world	• Refusal of visits	• Concrete services	• Cannot communicate

Figure 3. The Developmental Ladder and Levels of the Therapeutic Process with Children and Adults
(Greenspan, 1992)

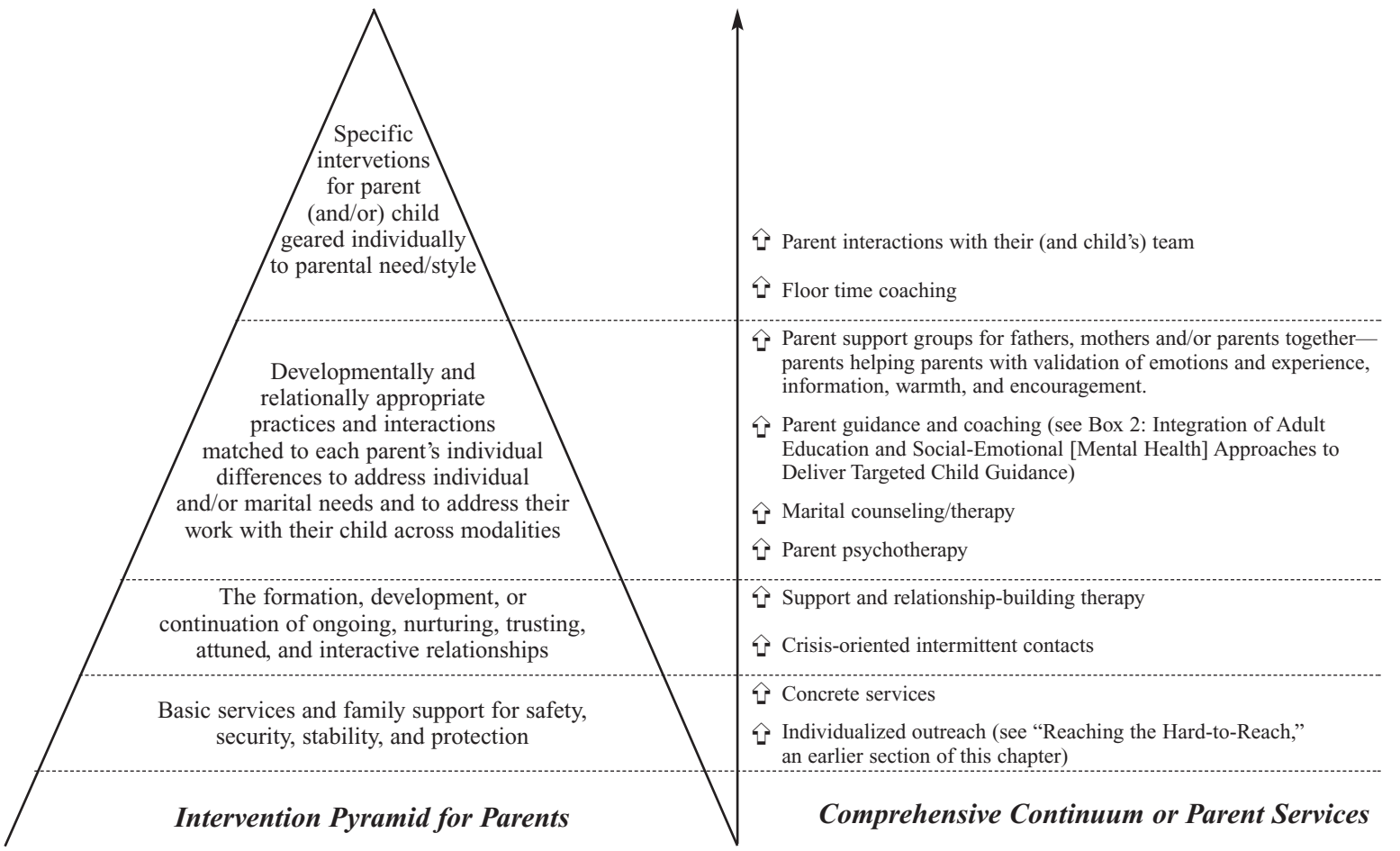

Figure 4. Intervention Pyramid for Parents and the Continuum of Services Necessary to Reach all Parents

ties, may find it difficult to engage in regular collaboration. A parent may be "stuck," but with sensitive outreach, the marker process of having a needy child could become a motivation for new growth. These are parents whose own life experiences have left them mistrustful, resistant, disorganized, or overwhelmed, as briefly discussed earlier in the section called "Reaching the Hard-to-Reach." It is essential for the practitioners involved to talk with each other, sympathetically considering different approaches to outreach depending on what the *reasons* for a parent's avoidance may be. Just as children need their parents to woo them up the developmental ladder so, too, do some parents need professionals to do the same with them.

All too often, a program gives up on a parent who "never comes to meetings, let alone to appointments." Practitioners end up believing that parents may not care enough about their child or that they haven't accepted the child's disorder when, in fact, the reasons for noncompliance are likely to be far more complex. Outreach is an exercise in caring and extending developmentally based invitations over time—sometimes over a long time. If there is no one on the team who has experience with resourceful outreach, this is an area where generative consultation and staff training are indicated. What the parents need is sensitive, individualized outreach, with careful attention given to the levels of the developing therapeutic relationship (Greenspan, 1997) and an understanding of the parents' own perspective. Developmentally appropriate practices and interactions are based upon a recognition of individual differences and an increasing awareness of the state, mood, and intention of the parent on the part of the professional.

It is always crucial to stay connected with what parents are looking for and how parents view the professional's role, as well as the trajectory of events and interactions that led up to the present one. When the parents of a severely delayed toddler reached the third intake social worker who asked them how they *felt*, the mother blurted out, "I *feel* like hitting you in the head! What I *want* are services for my child, not a discussion of how I *feel*. What I feel is that he needs services—NOW!" Although there is increasing recognition that parents' emotions are important, practitioners do not always know how to gain access to them. In-service training can target this area. Becoming aware of both manifest and latent elements boosts a practitioner's ability to meet parents "where they are." As it happened, the particular mother in this example is an exceptionally competent, warm, and related person and a very strong advocate for her child. She was not avoiding her feelings. She was simply fed up and needed the social workers to join her in addressing "first things first." Her emotional connection with her son had to be addressed first by providing services to him, which would make room for deepening the work with her a little later.

What might have appeared to be a difficult mom was, in fact, a frustrated mother-lioness, roaring to protect her young. She had already accepted her child's challenges and the fact that she had to work with others to help him. She was past ready to move ahead. A responsive social worker could use this mother's outburst to shift gears, welcoming it as a terrific opportunity to empathize with her frustration and to move the acquisition of child services along.

Mismatches are more likely between parents and practitioners of different cultures, ethnicities, and classes. Talking openly with parents about their views, reflecting with staff members, and consultation may all help minimize misattributions.

When several parents in a program do not participate or when practitioners experience the "we"/"they" phenomena—as in, *we* hold events/make appointments, *they* don't show up—professionals should see this as an unequivocal announcement that there is a problem with the program. Discussing how to revise the program with a resourceful, trusted professional or a parent experienced with a range of parents can be a breath of fresh air for parents and professionals alike. Often, parent-facilitated support groups provide a lively, deep-feeling forum within which many ideas for improved parent-professional relations emerge. But flexible, responsive, self-aware, and thoughtful practitioners are needed for wholesome changes in programs to evolve.

The early intervention program for young children in foster care described earlier in this chapter illustrates how even situations that look nearly hopeless can be turned around. Well-intended personnel were about to abandon open visits in the classroom by disruptive and demanding birth parents. When helped to think about these parents as people having their own significant needs, the staff decided not to rescind the open visits but, instead, to hold a support group prior to the classroom visits, with refreshments provided. Before long, the program personnel not only found the birth parents more responsive, and even helpful, in the children's classes, but several parents used the support group as a stepping stone to individual, psychotherapeutically oriented intervention and/or skills training, such as, for example, studying for their high school equivalency exam.

In a privately run suburban speech/language and occupational therapy program, staff complained that they never glimpsed parents because their children arrived for sessions with nannies and au pairs. At a single meeting with an experienced consultant, open discussion revealed that the intake practices of these professionals—which left parents sitting in the waiting area—sent a clear message to parents that this place delivered services for *children*, not for *them*. Recognizing this, the staff could have accepted the status quo. Fortunately, they had become increasingly aware of the relational basis for wholesome growth in young children and realized that they wanted the presence of parents. Over time, the director and her key supervisors pursued training and further consultation, which yielded revised, relationally sensitive practices from a family's first visit onward.

Each of these vignettes, one from the south Bronx and the other from a wealthy Connecticut suburb, exemplifies the principle that early intervention program staff will work successfully with parents to the degree that they become aware of parental needs and concerns, on the one hand, and of their own latent messages, on the other.

Mission Integration: Charting New Directions

State-of-the-art practice with parents of children who have special needs requires a generic base of knowledge coming from across, and integrating, several fields. It is time that practitioners, programs, policymakers, and managed-care companies recognize that this knowledge base is growing rapidly and requires life-long learning and growth. This implies that while a good professional education and internship are necessary, they are not sufficient.

The single word "integration" refers to several challenges faced by parents and their children and the professionals dedicated to helping them. The first challenge is to note and integrate with the strengths that a parent brings. Some strengths are obvious from the outset; some emerge over time. Some are

known to the parent, but only become manifest to the practitioner able to draw a parent out. Still others are discovered by the parent in the process of trying to meaningfully parent a special needs/hard-to-read-and-reach child. Practitioners able to follow both manifest and latent emotional content are able to play midwife to these parental discoveries, to cultivate them in their inception, by seeing and meeting them contingently.

To meet their children where they are, virtually all parents need to learn a great deal about topics ranging from typical unfolding development to:

- the complex meanings and layers of sensory processing,
- their own child's profile,
- ways of encouraging and limiting the child effectively, to
- service delivery options.

Thus, a second integrative challenge is that of education—how to offer parents the knowledge they need, when they need it, and in a form which they can use. *Targeted child guidance* can be very helpful for many parents who cope fairly well (see Box 2). They feel and function better as they become more effective on behalf of their child. Some of the knowledge coming from coached dyadic sessions is content knowledge, but much of it is process—doing and being—knowledge. In order for both kinds of knowledge to be synthesized and, thus, made usable, they need to be tailored to the particular parent, the particular child, and their particular relationship—what comes alive and grows, or does not, between them. Because several early intervention professions, such as education, speech, and occupational and physical therapy, do not prepare their practitioners to work with parents, mental health workers are often best able to do that tailoring. They are only effective, however, if they integrate a strength-centered perspective and learn a great deal from their body-based colleagues about individual differences in development.

The work is far more *in vivo* than the laid back, patient-does-most-of-the-talking-in-office type of work for which most mental health professionals were prepared. The process is less about interpretation or resistance, although experience with those domains of practice can provide productive guidance. It is more like life-space (Redl, 1966), community-based work (Shahmoon-Shanok, 2000), or kitchen-table psychotherapy (Fraiberg, Adelson, & Shapiro, 1975) in that it is not all talk and may, in fact, occur on-the-spot or in places of the parents' choosing. A lot of this work is preverbal, gestural, behavioral, interactive, and play-based, tailored to draw the person into relationship and communication.

Together, early intervention professionals must develop a generic foundation of developmental and relational knowledge that can be geared to the individual parent and child. The material necessary for professionals to serve parents and their children adequately is both *content knowledge* (for example, the material contained in this chapter) and *process knowledge* (the "being and doing"—interactional, what-we-do-spontaneously-when-we're-with-someone knowledge that is absorbed in a reflectively supervised apprenticeship). There is no better forum for learning than ongoing, long-term, specific-child-and-family oriented in-service training with trustworthy teachers over time. The kind of training, in which strengths are cherished and vulnerabilities are partnered (Shanok, 1992, p. 40), enhances awareness and self-awareness so that practitioners are enabled to use their own professional knowledge base with increasing sensitivity and connection to the feelings and relational capacities of parents (and children).

Box 2. Integration of Adult Education and Social-Emotional Approaches to Deliver *Targeted* Child Guidance[1]

I. Ask each parent what they enjoy with their child and (help parents) build variations and continuities from there. Help them by meeting them where they are and noticing what *they* bring to their child. To find meaning, satisfaction and hope within the demands and resources of the child and the program, they must feel engaged and effective.

II. Observe each parent with their child over time.

III. Woo parents and other key figures (grandparents, babysitters, siblings, inclusion aides) *for* the child by helping them to:
- Imagine the particulars of their child's sensory processing and arousal profile.
- Understand how this profile affects the in-flow and output of signals to and from him.
- Appreciate the fundamental role of (their) relationship in his learning.

IV. Coach parents and others in developmentally appropriate floor time play using knowledge coming from all team members.

V. See children *with* their parents and other key figures to support their abilities to woo their child into communicative relationship and play by:
- Observing.
- Recognizing and understanding their child's evolving developmental and relational profile.
- Reading and responding to his weak signals.
- Meeting their child at his developmental level and building from *his* intentionality, the affective key to learning.
- Drawing their child into an interactional, joyful relationship.
- Building the child's capacities for floor time circles of communication by strategically following and building from the child's intent and pleasure, using high affect and/or a sense of playfulness, as the child can tolerate.

VI. Recognize with parents both the content *and* process elements of developing knowledge.

VII. Notice with parents what bubbles up for them in their recollections and associations.

[1]Targeted child guidance means guidance *tailored* to the particular parent, the particular child, and their particular relationship.

Another point about integration is that, since individuation grows out of attachment and not out of separation, children with challenges need to have essentially achieved the first four steps on the Developmental Ladder (see Figure 3) before it makes sense to work toward greater individuation (cf. Ainsworth, 1978; Sroufe, 1993). Hence, parents should be included in child sessions unless there is an important reason not to; for example, if they are disruptive or self-absorbed during periods when they are overwhelmed. When the child has already achieved a good deal and is finally ready to move towards greater individuation, then separations in digestible doses can become part of the work. But even when the child is developmentally ready to move towards greater autonomy, attention needs to be given to a particular parent's own styles of, and desires for, connecting and disengaging. Professionals are there to assist the dyad, not to dare, provoke, or pressure either child or parent to hurry separation along. Nuanced awareness of cultural differences is particularly significant here.

In many jurisdictions, there is an arbitrary shift from one set of providers to another when a child reaches age 3. This shift seriously undermines parents who need people who know their children intimately and over time, people who share the history of this crisis, this marker process, in their lives. The age cut-off also undermines the professionals who work with children and families, forcing their practice into a revolving door operation, their emotions and dedication blunted with each arbitrary turn. And, for children whose main challenges include relationship, interaction, communication, and integration, this abrupt age-based dislocation can only be termed ridiculous.

Parent involvement is necessary for a developmentally appropriate family-based program for every child. This includes in home floor time play— how to make the most of playing together developmentally—as well as a sensory integration motor program. It also includes the routines, expectations, and limits—depending on the age and capacity of the child and on the style of the parents—of interactions that occur at bathtime, bedtime, and mealtime. It is important that professionals learn to work with parents to develop shared attention over day-to-day details, mutually enlarging the picture of the child, each from their own perspectives.

Each of the professionals involved with a child can come closer to responding to the parents' needs. For example, parents are often desperate to have two-way interaction and, later, a conversation with their child. Professionals can join their intent. Occupational therapists, for instance, can teach parents about constitutional, maturational variations in terms of their child's particular strengths and challenges and about how to provide a sensory diet that helps a child down-regulate for hyperarousal or up-regulate for hypoarousal. Indeed, while parents or caregivers are providing children with appropriate sensory exercise, reciprocity of affect and increasingly long chains of interaction become possible. This helps children connect their heightened intent with motor planning and sequencing so that they enjoy a behavioral outcome that matches their intent. There is no greater reward than that for the child and, when parents have a hand in facilitating it, for parents.

In addition, occupational therapists have a vital role in helping parents understand how they can provide for their children's basic needs by supporting their in-flow and out-flow filtering capacities. Occupational therapists also have a critical role on the team, helping all the adults understand the particular child's sensory, processing, and motor-planning profile, as well as his challenges, in practical ways so that he can be helped to

function at his highest levels more consistently across all his therapies.

Speech/language practitioners also can build upon the parents' growing desire to have reciprocal exchanges with their children by helping parents:

- Observe and notice their child's intent
- Slow down
- Use simple words or phrases
- Stay contingent to the child's interests
- Offer support
- Build joint attention
- Slow down some more
- Offer lots of clear cues
- Stay on the (child's) topic (S. Gerber, July 1999)

The dyadic, floor time, communication- and strength-savvy psychotherapist can help parents recognize even weak signals emerging from their child. One severely compromised, low-tone, bland, and pale-faced 2½-year-old boy, for example, manifested precious few shifts in facial expression in the course of a 90-minute dyadic assessment session. He did, however, evidence mild distress upon falling, and fleeting anxiety crossed his face as he stumbled against and made eye-to-eye contact with the seated therapist. The father seemed to see both encounters, yet ignored each one. The therapist quietly inquired, "Did you see that?" He responded, "My father would walk away when I hurt myself." Brief discussion and an on-the-spot acceptance of his own childhood feelings were followed by a few sentences about the need—especially the need of hypo-registering, weak signal senders—that signals be validated.

This brief interchange helped this father offer gentle, complementary affects. Thus, the next time his son registered an aversive reaction, the father quietly mirrored, gestured and said, "Ooh ... I see that banging your finger hurt ... ooh-ooh ... that's my boy ... okay now" in time and pace with the child. The therapist helped the father see that his son's response—leaning into the father's lap and appearing *more* hurt for a long moment—as dawning progress. The child was distinguishing his sensation within the relational field: Sensation was becoming emotion, and emotion was becoming signal. And signals are, of course, communication. A hint of the mutual regulation familiar in typical early development (Tronick, 1986) can also be glimpsed in this example.

The issue addressed in the foregoing example—that practitioners and parents often ignore manifestations of a child's sensations, emotions, and intentionality that the child experiences—is a critical challenge for the field. The disorders professionals are trying to correct have to do with *relating* and *communicating*. In typical development, babies and young toddlers experience sensations—say, stomach distress—which are "read" by the caregiver familiar with his eat-sleep-poop schedule and his repertoire of sounds and behaviors. When projected into a caring relational field, the sensations are, in effect, *elevated* to the status of signal by the signal reader. It is not a mirroring of the child, exactly. Rather, initial, two-way communication begins as mirroring-empathizing, as if to say, "Ooh-ooh, looks like that hurt" (or "was it fun?") and becomes, "I'll join with you on this so that you come to know what you feel. Only then will we move on." It is an amplification of the child's signals by contingent attunement. These interactions, repeated hundreds of times a day over many days, become the very basis for communication and relationship. Children with challenges need even more, not less, practice than their typically developing counterparts, especially with their closest caregivers. Therapists can and must help parents move their responses into slower motion: as in "Oh, you got hurt.

I see that this happened, that it registered on you. I emphathize and can stick with you while it is processed further. Only *then*, when it is processed further, will I help you move on." The response should not be "Let us cheerfully move on right away!" because the child is having trouble proessing the experience appropriately in the first place and conveying something about it in the second (cf. Fonagy & Target, 1998).

All practitioners would do well to note that people learn most effectively and thoroughly not by hearing or even by watching, but by doing, then reflecting on what they did, and then doing again. Facts, descriptive material, and theory boost and organize learning, but nothing can substitute for *experiential* knowledge. This is the idea behind supervised internships and field placements. Why should parental learning be any different? Thus, it is not sufficient to discuss general approaches with parents, nor is it enough to have them sitting to one side observing. Rather, parents have to be active in the child's therapies for them to really develop their potential for their child.

Jointly watched videotapes of child and parent or child and therapist, discussed together, can also become an asset in what should become a mutual learning and growing process. Practitioners may sometimes be surprised at how much there is to take in from observing a child with a parent. Certain approaches, such as comforting the child, may be adopted, adapted, or built upon.

SUMMARY

This chapter has briefly described the potential inherent in moving the state of the field toward the state of the art by meeting the needs of parents so that *they* can meet the needs of *their* children. Policymakers must move to fund varied options for parents as well as reflexive supervision and other forms of care-based training for staff. Still, there are many actions that programs and practitioners can take to push forward in these directions. With concentrated work and concerted attention, programs and professionals can:

- *Remember that intervention begins at the first moment of contact and assessment never ends until the case is closed.*
- *Learn how to conduct outreach effectively* by making their approaches more individualized.
- *Designate one key person from the staff to serve the particular family.*
- *Engage in in-service meetings* that emphasizes social-emotional, developmental, and transactional themes as well as cross-disciplinary fertilization, case-by-case.
- *Help parents become active partners* in therapeutic sessions for children rather than being passive viewers or being excluded altogether.
- *Work with parents with regularity* and address their developmental level and both latent and manifest themes.

All the professions can also help parents recognize that baby steps do build incrementally over time. While it is sometimes difficult to believe that tiny baby steps can get anywhere, in most cases they do, so that children with significant challenges often become related and capable of sharing pleasure and fun. As one deeply dedicated mother of a child with special needs noted, "We measure miles in millimeters."

Developmental disorders are not only constitutional challenges residing in the child; they become *relationship* disorders. Because all children depend on their primary relationships for cognitive, social, emotional and identity development, practitioners must attend as much to the

child's relationship with parent(s) as to the child. By placing the child's deep needs for the parents' love—and by placing the parents' deep needs for the child's love—both on center stage, therapists can nudge the spotlight away from symptoms and deficits and place it where it belongs: On the circular, back-and-forth transactions which, over time, become relationship and communication and which, simultaneously, nurture the developing emotional and cognitive intelligence of the child.

Virtually all parents of children with special needs require support, partnership, and substantial new skills and knowledge learned in the context of their particular child. Most parents also need assistance with difficult feelings. And some parents have a range of other needs, from concrete services, to crisis intervention, marital counseling, and psychotherapy, all of which need to be closely linked to the work with the child. Attuned, individually geared work with parents is likely to bolster their growing abilities to be attuned, engaged, and individualized with their children. Even as the child is being helped to function better during therapies, the parent is being assisted to more closely respond to the child's shifting states and capacities. Some interventions noted in this chapter respond primarily to the child's needs, whereas others respond to the parents' needs. A family is a dynamic system—what benefits one transactionally supports the other. Indeed, the action *is* in the interaction. ■

Notes

[i]Parts of this chapter were previously published in Shanok, R. (1997a). Giving back future's promise: Working resourcefully with parents of children with severe disorders of relating and communicating. *Zero to Three, 17*(5), 37-48. The author acknowledges ZERO TO THREE, the National Center for Infants, Toddlers, and Families (formerly the National Center for Clinical Infant Programs) with profound appreciation. With the inspiration and leadership provided by its first president, Stanley Greenspan, M.D., ZERO TO THREE became the pioneering national forum for transdisciplinary exchange and network-building on the issues addressed in this chapter.

[ii]Throughout this chapter, for simplicity, all children are referred to as "he," and all therapists as "she."

[iii]As a set of guidelines, this chapter represents what *should* be in place for parents within every program that serves children who have developmental challenges. As such, it is a call to policymakers to provide the necessary funding, not only for the services themselves, but also for in-service training to support staffs as they move in these directions. At the same time, shifts can be initiated to improve interventions with parents through democratic program leadership with an engaged, mission-expanding staff. While discussion of program-based shifts per se lie beyond the scope of this chapter, some guidance about how to move toward the relationship-based, reflective practice that supports fine parent work may be gleaned from Gilkerson and Shahmoon-Shanok (2000) and from Shanok and Gilkerson et al. (1995).

[iv]All names and identifying details of children, families, and practitioners in these and other examples have been concealed, except for those of the author.

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