

Preface

The handling and facilitation involved in baby treatment are among the most precise forms of therapeutic exercise. A therapist's handling can give the baby experiences of typical movements and typical movement sequences that can enhance the baby's development of motor learning skills. The movement experiences you provide can help the baby learn how to solve difficulties in performing motor skills in a variety of ways. Your handling can help the baby learn typical, efficient movements rather than atypical, stereotyped movements.

How you handle and facilitate the baby are very important. Always consider kinesiobiological issues such as alignment, joint mobility, and muscle activation because the baby's musculoskeletal system is in the process of developing and therefore is very vulnerable to input. Sensory issues are of particular importance in baby treatment because sensory feedback is a major channel of motor learning.

This book provides suggestions on handling babies to improve the quality and repertoire of their movements. Most of the facilitation techniques presented and described in this book, *Baby Treatment Based on NDT Principles*, stem from facilitation techniques created by Mary Quinton. She transformed her visual observations of babies, who were developing typically, and her gifted understanding of movement into creative and gentle ways to help babies with movement disturbances learn how to move.

In many ways, *Baby Treatment Based on NDT Principles* is the basis of *Facilitation Techniques Based on NDT Principles* (1997) that I wrote with Allison Whiteside. The facilitation techniques in both books have evolved from those originally created and taught by Mary Quinton, who was the instructor of my original NDT Baby Course in Bern, Switzerland. At that time I had no idea how Mary Quinton would change and enrich my professional life.

It was in that NDT Baby Course that I first was *exposed* to "baby facilitation techniques." Four months after I took the course, I returned to Bern to work for 2 months, to *learn* how to treat babies. After I returned home, I continued to practice and use the baby techniques I used them on all of the babies and children with whom I worked. Eventually, I realized that not all of the techniques were appropriate for older children and that those that were appropriate required modification or adaptation to their needs. Subsequently, I separated the techniques into those for babies and those for older children.

In the NDT Baby Course in Bern, and in other courses that I have taken with her, Mary Quinton taught and shared the baby treatment techniques that she had developed. Her teaching was unique in that it was almost entirely experiential. She emphasized how important it was for each of us to experience the movements we would use to treat babies so that we could get the movements into our own body image. I continue to use this method of teaching in my courses. I highly recommend that you also experience the postures and movements of the babies you are treating. The experience will be very enlightening.

In Ms. Quinton's courses, we also used dolls to practice the techniques. By using dolls, we could practice the techniques and develop our coordination and skill without subjecting babies to our clumsy learning process. Of course, treating a doll is much easier than treating a real baby. I continue to use this method of teaching in all of my courses. I highly recommend that you practice each of the techniques with a doll before trying them on a baby. Facilitating a doll also is a good way to demonstrate the techniques to parents and other caregivers.

There were no handouts in Mary Quinton's courses, and none of her genius in treating babies has been published. (However, there is a series of five movies in which Ms. Quinton treats a baby over a 1-year period.) During Ms. Quinton's courses, I tried to write down the techniques so that I would not forget them. My drawings and original descriptions left much to be desired. However, because of my learning experiences with Ms. Quinton, I went back and practiced the postures and movements on myself and on a doll to try to reinforce my "motor memory." I continue to be thankful that Ms. Quinton made me aware of and opened that channel of learning for me.

Unfortunately, most therapists will not have the opportunity to take a course from Mary Quinton. However, I trust that many will continue to learn from her through this book, *Baby Treatment Based on NDT Principles*.

Although the facilitation techniques presented in this book have their origins in the work of Mary Quinton, I have added my own understanding and perspective to the process and art of facilitation. I have added the emphasis on the kinesiological and biomechanical components and the need to address the sensory components of motor learning. I take full responsibility for any unintentional misrepresentation I may make of Ms. Quinton's work. I have worked with and taught the material in this book for many years. I continue to teach "Baby Courses" that vary in length from 1 to 3 weeks.

Baby Treatment Based on NDT Principles is a companion book to my two other books: *Motor Skills Acquisition in the First Year* (1994) and *Facilitation Techniques Based on NDT Principles* (Bly & Whiteside, 1997), written with Allison Whiteside.

Motor Skills Acquisition in the First Year (1994) is a worthy companion in that it describes and illustrates how babies typically move so easily, how they solve motor challenges, and how they practice and develop a variety of motor skills. Babies who have developmental delays, cerebral palsy, and/or other motor dysfunctions have difficulty moving. They have difficulty with solving motor challenges, and they are limited in the variety of their motor skills and often develop and use very stereotyped movements.

You will find that the outline of this book, as well as many of the descriptions and explanations, are the same as those in *Facilitation Techniques Based on NDT Principles*. We thought that it was important to have two books even though there are many duplications. The content of each book is unique in the type, size, and age of clients being treated. For babies, you must use hand placements, body positions, movements, and body mechanics that are different from those you use with older clients. You also must interact differently with a baby in order to monitor closely and change the baby's state, attention, and physiological status.

Each chapter consists of many facilitation techniques. A stated treatment/movement goal introduces each technique, followed by the baby's position, therapist's position, therapist's hand placement, movement, precautions, component goals, and functional goals. In addition to the detailed directions, many sequential photographs illustrate each facilitation technique.*

Each section describes the component goals for each facilitation technique in detail. Functional goals are more vague because they need to be specific to the motivation and interests of individual babies. I strongly believe that all therapy must be functionally oriented and directed. Therapists must incorporate these functional goals into each treatment session. I do not believe that just providing the components will enable the baby to incorporate them automatically into functional goals.

Photographs and written explanations illustrate and describe each of the techniques in the 12 chapters: Supine, Supine Rolling, Prone on Lap, Prone on Ball, Prone on Floor, Prone on Bolster, Floor Transitions, Sitting on Lap, Sitting on Lap Sequences, Sitting on Ball, Sitting on Bolster, and Standing and Walking.

You must use professional judgment and careful administration in the selection and use of any of the techniques with any baby. Not all of the techniques are appropriate for all babies. If any baby has difficulty with any of the facilitation techniques, you must **never** try to force the baby through the facilitation. Instead, modify or temporarily abandon the facilitation. Do not attempt to use a facilitation technique that would compromise the baby's safety. **The baby's safety and comfort always must be the primary consideration.**

Your safety is also a concern. You need to know your strengths and abilities to handle babies with various degrees of impairments and disabilities. Always use good body mechanics to prevent and avoid personal injury.

The photographer photographed 24 charming babies ranging in age from 4 months to 13 months for this book. Ten of the babies were born prematurely; three of the babies had a diagnosis of Down Syndrome, and two had a diagnosis of developmental delay. We selected the babies to demonstrate the facilitation techniques, not to demonstrate impairments. The goal of the book is to demonstrate specific facilitation techniques, not to treat specific impairments.

All of the babies came from the Tucson, Arizona, area. The parents volunteered to have their babies photographed for a textbook in response to notices placed in the offices of pediatricians and the Tucson Developmental Follow-Up Clinic for Families and word of mouth from friends. We selected Tucson because the homes of my valuable assistant, Allison Whiteside, PT, and photographer Ron Medvescek are in Tucson and I love visiting Arizona.

Conclusion

Facilitation techniques are not synonymous with treatment techniques. Treatment is much more encompassing. You must design treatment to address each baby's specific interests, strengths, and impairments. Facilitation techniques are one—albeit important—facet of treatment. They are a means by which you can help the baby engage in activities that are interesting, while using innate strengths and

reducing impairments that limit or prevent such participation. Facilitation techniques enable the baby to experience a variety of movements and add to the baby's repertoire of movements. Although you help the baby through the movements, the experiences can help the baby solve movement challenges more effectively and decrease the chances of, or altogether prevent, the baby's learning stereotyped positions and/or movements. Regardless of which facilitation techniques you use, incorporate them into a functional activity or goal that is meaningful for the baby. Play and exploration of body parts is functional for babies. This will facilitate the baby's use of the movement in real life.

It is my hope and prayer that this book will help you to help many babies discover their unique possibilities.

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* Some of this material previously appeared in *Facilitation Techniques Based on NDT Principles*, 1997.

Introduction

Principles of Baby Treatment

Treating a baby is both a joy and an awesome responsibility. Babies are fun to work with because they are cute, small, easy to hold and handle, and receptive to treatment.

Treating a baby is an awesome responsibility to accept because you help shape the baby's development by how you structure the therapeutic environment and how you instruct the caregivers. The baby is very vulnerable to handling and to the environment because of the plasticity of the developing systems. All experiences in the extrauterine world are new experiences to the baby.

In the early months of life, all of the sensory systems (visual, tactile, proprioceptive, kinesthetic, vestibular, auditory, and olfactory) impose incredible degrees of sensory stimulation on the baby. The baby must learn how to regulate all of the incoming stimuli in order to be in an optimal state to learn new skills.

Although this regulation usually occurs in the early months of the baby's life, it is important to assess each baby's ability to regulate incoming sensory stimuli regardless of the baby's age. When the baby is content, alert, moves smoothly, and breathes regularly, we assume that the baby's regulatory skills are functioning appropriately. When the baby is stressed or not alert, we must determine the cause of the stress or lack of interest and decrease the stress and potential sources.

Babies who are medically fragile also may have problems with behavioral state regulation and stress management. It is imperative, when working with fragile babies, to become knowledgeable about the baby's medical status, contraindications, precautions, and symptoms of stress. Learn to recognize and manage physiological changes that may arise while you are working with the baby. If you are planning to treat babies who are medically fragile, it is extremely important that you participate in a mentorship or training with an experienced professional preceptor.

State Regulation and Stress Signs

A critical component of treatment of babies is awareness of the baby's stress signs. Stress indicates that the baby is not functioning optimally and therefore will have difficulty learning the movements you are trying to teach. Stress also can be detrimental to the baby's health and well-being. Although crying is an obvious sign of stress, most babies give signals of stress before they actually cry.

Although developed for specific use with neonates, Als' *Synactive Model of Neonatal Behavioral Organization* (1986) is valuable for examining, evaluating, and monitoring all babies during treatment. In this model, the therapist observes the continuous interaction of the baby's three behavioral systems (i.e., autonomic system, motor system, and state system) in relation to the baby's interaction with the environment. Als suggests that the baby communicates through these three behavioral systems and refers to this communication as "behavioral language" (Als, 1997, p. 969).

The **autonomic system** is responsible for regulation of respiration, cardiac function/color, and visceral stability. When the baby is stable and organized, these systems function smoothly. When the baby is stressed, there can be changes in this system. Some of the indications of stress are changes in the respiratory pattern, yawning, coughing, hiccuping, color changes such as mottling or cyanosis, temperature changes, trembling, spitting up, bowel movements, tremors, startles, or possibly seizures (Als, 1986, 1996, 1997).

According to synactive theory, when the baby is organized and not stressed, the **motor system** functions easily, with smooth movements and postures. When the baby is stressed, posture and movements may become hypertonic or hypotonic or fluctuate between the two. The hypertonic behaviors include marked extension of the trunk and extremities, scapular retraction with a high-guard position of the arms, finger extension or finger fisting, and facial grimaces. Hypotonic behaviors include flaccidity and a gape face (Als, 1986, 1996, 1997).

When the baby is organized and not stressed, the baby's **state and attention systems** are stable. The baby can move through clearly defined states of sleep, alertness, and crying. In the alert state, the baby can attend to and interact with the environment. When the baby is stressed, the sleep-wake cycles might be disturbed; crying and fussiness might be defined poorly; and inconsolability is common. The baby may use gaze aversion when stressed or make quick and unpredictable fluctuations between states instead of attending to and interacting with the environment (Als, 1986, 1996, 1997).

When the baby exhibits stress in any system, pay close attention to the signals, the behavioral language. The baby is communicating with you and asking you to modify what you are doing by changing your speed or direction of movement or choosing a novel toy. Sometimes you must stop what you are doing, comfort the baby, and help the baby recover a more organized, attentive state.

As already mentioned, the baby communicates through behavioral language and stress signals. When you learn to identify the baby's subtle language and stress signals and respond to them, you communicate back to the baby that you understand the message. If you miss the baby's subtle signals, they become more intense and sooner or later escalate to crying. In other words, crying often occurs because early signals of stress elude the caregiver. A baby who is crying is not in an optimal state to learn. The parents or caregivers of a crying baby also are stressed and not in an optimal state to learn. **Be intentional about learning babies' behavioral language so as to keep them from reaching the crying stage.**

Some babies will cry during therapy, but do not try to "push through" the baby's crying. Try to find the reason for the crying. Discuss the crying with the caregivers, and mutually decide on an approach to minimize it.

The baby communicates pleasure through smiles, eye contact, pleasant vocalizations, regulated breathing, stable color, and smooth participation with the activity. Be sure to acknowledge this communication and reciprocate with pleasant signals back to the baby.

Sensory Issues

We need sensory feedback in order to learn, regulate, and adapt our movements (Gordon, 1987; Cech & Martin, 1995). The visual, vestibular, and somatosensory systems are three primary systems through which we receive and channel sensory

information. When sensory information coordinates with the motor system, we can make postural adjustments, perform movement, and learn and use motor skills.

Consequently, sensory input and feedback play a vital role in a baby's motor development. As the baby receives sensory information from the visual, vestibular, and somatosensory (tactile, proprioceptive, kinesthetic) systems, it is integrated with the motor system and enables the baby to adjust (right) the head, body, and limbs in space and in relation to each other and gravity (Shumway-Cook & Woollacott, 1995). The baby rights the head and trunk with extension in prone, flexes the head and trunk in supine, and laterally flexes the head and trunk in sidelying. In sitting and standing, the baby rights the head and trunk with extension when the center of mass shifts forward, with flexion when the center of mass shifts backward, and laterally when the center of mass shifts laterally.

Once the baby experiences and practices such movements and postural reactions, the baby learns to anticipate the need for the postural adjustments and subsequently makes the postural adjustments before the actual movement occurs. These adjustments—movements the baby makes in anticipation of the requirements and prior to sensory feedback—are called “feedforward” (Horak, 1991). In other words, we learn movements and postural adjustments through feedback and we then perform them with feedforward. We use feedforward in our habit patterns and “automatic” movements.

Because the baby learns movements and postural adjustments through sensory feedback, the baby must be able to receive, regulate, and adapt to this input to develop and perform optimally. The baby's reception of and adaptation to sensory feedback influences the movements the baby uses, the movements the baby practices, and the movements the baby learns and uses automatically with feedforward. A baby with sensory system impairments may learn, practice, and use compensatory or stereotyped movements habitually through feedforward. Small motor compensations early in development can lead to major motor-related problems in later life (Bly, 1983).

Some babies with motor problems have difficulty with reception, regulation, and/or adaptation to sensory stimuli. Some babies have “hyper” responses to sensory stimuli; others have “hypo” responses. Because the baby's early postural adjustments and movements are the foundation for future movements, early detection and treatment of sensory impairments are particularly important. Therefore, examination, evaluation, and treatment of the baby must include attention to the sensory systems.

You will enhance the baby's treatment when you determine if the baby's motor difficulties are the direct result of a motor impairment or an indirect result of a sensory impairment. For example, when a baby has poor head control, the baby's head is often in an abnormal position, i.e., the head lags when the baby is pulled to sit, or the head remains laterally tilted instead of adjusting to the vertical when the baby is sitting. Determining the source of the problem may be as simple as looking at the baby's facial expressions. If the baby does not seem to be stressed with the head in these positions, the baby may not be aware that the head is not in the optimal position. It is possible that the baby is not receiving or not processing the feedback that the head is not in an optimal position. In such occurrences, treatment must include techniques that enhance the sensory feedback in conjunction with the motor response.

On the other hand, if the baby's facial expression suggests that the baby is stressed and aware that the head is in an abnormal position, the baby's sensory feedback may be appropriate but the motor control may be ineffective in responding to the feedback. Treatment must include techniques that integrate the motor control with the sensory feedback.

In this text, sensory considerations accompany each illustrated facilitation technique. However, examination, evaluation, and treatment of serious sensory problems are beyond the scope and focus of this book. Further research on sensory topics is necessary (Blanche, Botticelli, & Hallway, 1995).

Kinesiological Issues

The baby's musculoskeletal system is incomplete in its development and is vulnerable to input and experiences. Consequently, the way the baby initially learns to move provides the kinesiological foundation for later movements.

Very young babies do not have full range of motion at all of their joints. Babies under 6 months of age often have limitations in spinal extension, hip extension, hip internal rotation, and shoulder flexion. (See Cusick, 1990, for more details on anatomical features of the lower extremities in infants.) Babies gradually increase the range of motion at each of their joints by practicing a variety of movements.

Babies typically activate and elongate their muscles by moving on all three planes of movement; sagittal, frontal, and transverse. They play with flexion and extension in supine; extension and flexion in prone; lateral weight shifts to each side in supine, prone, sitting, and standing; and rotation around the body axis in all positions. Flexion and extension occur on the sagittal plane; lateral movements, abduction, and adduction occur on the frontal plane; and rotation occurs on the transverse plane.

Babies with movement impairments do not practice movements on all three planes. They usually maintain a few positions and rarely alternate between positions. They often move primarily on the sagittal plane and subsequently develop stereotyped and compensatory movements. Because they do not use a variety of movement patterns, they have difficulty activating and elongating all of their muscles. Consequently, they may never develop full range of motion at all of their joints. If they do not develop full range of motion and do not elongate their muscles fully, they are vulnerable to musculoskeletal contractures and deformities.

The goals of the facilitation techniques in this book include **guiding** the baby through a variety of goal-directed movements to help the baby learn new movements. The facilitation techniques also help increase the baby's muscle extensibility and joint range of motion to prevent or minimize the development of musculoskeletal deformities. Try to select techniques that encourage the baby to alternate between positions, move on all three planes, and move through a variety of positions in each treatment session. The baby must be an active participant in the guided movements in order to take eventual control of the movements. You can help the baby to be an active participant by providing a motivating environment and helping the baby explore the environment.

Neutral alignment of body parts enables the muscles to work most efficiently. You can help the baby by providing neutral alignment of body parts when facilitating the baby through all of the different movements. When trying to align the baby's body parts, **never try to force** the baby into greater range of motion at any joint than is comfortable for the baby. If you are too aggressive, you can create a new skeletal impairment.

A common biomechanical problem recognized in older children with cerebral palsy is a kyphosis, flexion of the spine. The thoracic spine is especially vulnerable to this

deformity. In order to prevent or minimize this problem, most of the facilitation techniques described in this book emphasize alignment and maintenance of alignment of the spine.

Another common biomechanical problem that occurs in older children with cerebral palsy is abnormal dissociation of the rib cage and pelvis: the rib cage moves over a stable pelvis, rather than the rib cage and pelvis moving synchronously. This often occurs because the thoracic spine has limited mobility in extension, lateral flexion, and rotation. Subsequently, the rib cage moves as unit, and hypermobility develops between the twelfth thoracic vertebra (T-12) and the first lumbar vertebra (L-1). In order to avoid this problem, the directions for the facilitation techniques always state to move the rib cage and pelvis sequentially, so that the pelvis moves over the femur at the hip joint. Do not rotate the rib cage over a stable pelvis.

Another progressive biomechanical problem frequently seen in older children with cerebral palsy is the “crouch-gait” posture, characterized by problems on all three planes. Foot pronation (dorsiflexion on the sagittal plane), eversion on the frontal plane, and abduction on the transverse plane can initiate this posture biomechanically. Excessive pronation can facilitate hip and knee flexion (a sagittal plane compensation), hip adduction (a frontal plane compensation), and hip internal rotation (a transverse plane compensation), which are the characteristics of the crouch gait.

The crouch-gait posture does not occur in the young baby because soft tissue tightness around the hip joints initially holds the hips in abduction, flexion, and external rotation. However, if therapy does not address the posture of the feet, the baby will develop these lower-extremity compensations over time. To prevent or minimize this problem when the baby bears weight on one or both feet, always transfer the weight to the lateral borders of the baby’s feet. You can accomplish this by extending the baby’s hip and knee and externally rotating the femur. If it is difficult to transfer the baby’s weight to the lateral borders of the feet, the baby should wear orthotics.

Role of the Developmental Sequence

Historically, therapists used the developmental sequence as a model for therapeutic intervention, assuming that recovery after a neurological insult followed the same process as infant development (Gordon, 1987).

Designing or recommending treatment sequences that follow a developmental sequence is **not** the focus or intention of this book. I do not view the developmental sequence as a continuous process in which one milestone is the foundation for the next milestone. Instead, I view the milestones as age-appropriate behavioral characteristics (Bly, 1994).

However, in therapeutic work with babies, you should be intimately familiar with the developmental sequence, not to follow it but to establish age-appropriate goals for each baby. You need to know which motor skills the baby skipped or missed, which motor skills the baby should currently be engaged in, and which motor skills the baby should soon be engaged in.

Mary Quinton frequently stated that when treating a baby, one must work for the past, present, and future simultaneously (M. Quinton, personal lecture notes, 1976, 1978). A treatment session should include facilitation that addresses each condition, but not necessarily in a past-present-future order.

Ms. Quinton advised working “in the past” to fill up the gaps or holes in the baby’s movement repertoire. When working “in the past,” look for a common denominator that occurs in many of the problems, and continue to work on this until the baby uses it automatically.

Work “in the present” to enable the baby to participate in age-appropriate activities and to interact with self and caregivers. Remember, however, that the present quickly becomes the past when working with babies.

Work “in the future” to prepare the baby for age-appropriate activities of the future. It is important to work approximately 2 months ahead.

For example, a 7-month-old baby may have difficulty with weight shifts in sitting and therefore has difficulty moving into and out of sitting and difficulty with retrieving toys that are out of reach when sitting. Treatment of the present would include facilitated weight shifts through all planes of movement while sitting, facilitation of various transitions into and out of sitting, and use of toys that are motivating and easily controlled by the baby.

Further examination of the baby’s skills may reveal that the baby also has difficulty with weight shifts in the prone position and a resultant inability to play with toys in prone. Most babies can shift weight in prone and play with toys with one hand by the age of 5 months. Therefore, treatment “of the past” for this 7-month-old baby could include facilitation of controlled weight shifts in prone and use of toys that are motivating and easily controlled by the baby. The therapist also could incorporate weight shifts in prone into transitions from prone to sitting.

To prepare this baby for the future, the therapist could facilitate the baby from sitting to standing and practice weight shifts in supported standing. Practicing weight shifts in standing helps prepare the baby for future walking.

In this example, the common denominator is the baby’s poor ability to control lateral weight shifts. Therefore, the therapist would use facilitation techniques that include weight shifts throughout the treatment session. The order of the facilitation techniques can vary according to the baby’s interests and desires. The session may begin in sitting and transition to the floor or to standing for a toy, then transition back to sitting. The session also may begin in prone or standing if preferred by the baby. Regardless of the order, the therapist can address the past, present, and future motor skills throughout the session.

Consider the past-present-future philosophy when planning and selecting facilitation techniques for the baby’s treatment session.

Your Hands

Your hands **facilitate**, or assist, the baby through movements. Your hands guide the baby; they must never **push, pull, or force the baby**. Because of the size difference between you and the baby, it would be easy for you to overpower the baby’s movements and take the baby through all of the facilitation techniques without the baby ever participating. That is never the goal of the facilitation.

Your hands align and maintain the alignment of the baby’s body during the movement until the baby’s own muscle control takes over. As the baby takes over the control for the alignment and the movement, you gradually reduce your control until you finally remove your hands. It is imperative that the baby take over the control. Therefore your hands must be sensitive to the baby’s active participation.

When you are first learning the facilitation techniques, you probably will be more concerned with what you are doing than with what the baby is doing. The muscles in your hands (and probably your arms and body) will be working so hard that you will not be able to feel whether the baby's muscles are contracting. You are "fixing" or limiting your degrees of freedom. This is a normal process in motor learning. You must practice the facilitation techniques to reduce your fixing and become more sensitive to what the baby actually is doing. It is very helpful to practice with a rag doll. You **must** be sensitive to the baby's active control in order to modify your control and enable the baby to progress.

When you are facilitating, your **guiding hand** is the hand that controls the movement. Your **assisting hand** participates when the baby needs a little more help perform the movement smoothly and maintain proper alignment. Remember to wait for the baby to respond and participate. Your hands will feel this response after you become more comfortable with the techniques and you attend to the baby's responses.

Your hands communicate with the baby. They not only align the baby's body parts and tell the baby how to move; they also give the baby security and confidence. Your hands, along with your eyes, also detect how the baby is feeling. A baby who feels secure in your hands will let go of fixing patterns and participate in the movement. Your smiling face also is reassuring to the baby.

Play

Use of play is of vital importance when working with babies. Play is a functional activity in which all babies engage. It is their means to investigate and learn about the world. Their curiosity drives them to explore their world. This investigation introduces new motor challenges that necessitate problem solving and "research" into how to examine, manipulate, and use body parts, objects, other people, space, and sensory feedback effectively.

Play motivates the baby to move and learn new movement strategies; therefore, you will need to practice all of the facilitation techniques in the context of play. The movement itself and the sensory feedback from the movement may be exciting play to the baby. Play also may involve the use of toys.

When selecting toys for a baby, choose age-appropriate toys, even if the baby's motor skills are impaired. Babies often are disinterested or frustrated with toys that are below their age level. Select toys that will be interesting to the baby and enhance your treatment goals. Remember, it is important to permit the baby actually to play with the toy. Do not just use toys to distract the baby. Development of play skills is an important treatment goal.

Discovering and playing with body parts are important developmental steps for all babies. Babies explore their hands and feet with their eyes, hands, and mouths. Add these discoveries to your treatment sessions.

Music is motivating to many babies. You can use songs to engage a baby in specific movements. You don't even have to be able to carry a tune to engage the baby in the song. Music is also helpful in calming or alerting a baby.

It is important to find a play mode that will interest each baby. A baby who is not interested in play or does not know how to play often is not motivated to move. The baby's failing to participate actively in the movement will limit carryover and learning. It is critical that you find something that interests each baby because functional movement is goal-directed.

Equipment

You will perform the facilitation techniques on various pieces of equipment: your body, a ball, a bolster, or the floor. Try to use a variety of equipment, but when you select the equipment, consider whether you can manage both it and the baby simultaneously.

Use your body as equipment when the baby is small and fits easily on your lap or your legs. Your body can provide security to the baby because it is natural for babies to be held. Holding babies close to your body is especially important for babies who are insecure in open space.

Do not use your lap if the baby is too large. If the baby is too long for your lap and you try to flex the baby to work on the supine facilitation techniques, you will cause a thoracic kyphosis. This subsequently leads to neck hyperextension and all of the associated problems.

If you use your legs, your legs must be free to move up and down according to the baby's needs. When the baby is on your legs, your movements are very restricted. If you need to move or need to move the baby more freely, do not use your legs.

The bolster is the easiest piece of equipment to use because it moves on only one plane. Select a bolster that meets the baby's needs for height and width.

The ball is the most difficult piece of equipment to use because it is unpredictable and can roll anywhere. Larger balls are easier to manage than smaller balls because there is more surface area on which the baby can move. Use small balls if you want to transition the baby from the ball to the floor. Whichever ball you use, make sure that you are holding the baby securely so that if you lose control of the ball, you still have control of the baby.

The Family

The family members are obviously the most important people on the baby's team. Address the family's needs, support and encourage them, and educate and teach them about their baby's strengths as well as needs. Involve them immediately in planning the baby's treatment program, carrying over treatment activities, and setting goals for home. Feel free to give them as many treatment ideas as they can manage. The more involved the family becomes, the more consistent therapeutic management becomes for the baby. Treatment ideas that the family members can incorporate into the daily care of the baby will be easier to implement in the home setting.

Complex needs and stresses occur in families with a baby with special needs. Therapists, typically, have not been trained to deal with these issues. It is important for each of us to read and participate in workshops that teach us how to fit into the big picture so that we can be effective in helping support the baby and the family.