AlertSeat Article

It's the brain – not the body – that is the basis for the practice of Carla Oswald Reed who has been a Pediatric Physical Therapist for 50 years.

Carla's child clients all have some disorder or condition that interferes with their brains generating or experiencing the many variations of movement that are expected and usual for typical babies. Carla finds this lack of variations to be the most significant factor in causing the developmental limitations usually seen in these children. Therefore, bringing experience of the usual variations into the life and brains of these children is her highest priority and the source of her remarkably positive outcomes.

Families bring their children to Carla's practice, Movement to Wholeness, LLC in Sterling, VA with diagnoses that include cerebral palsy; HIE; cognitive, motor, and/or speech delays; complications of extreme prematurity; traumatic or anoxic brain injuries; and/or many forms of genetic and/or chromosomal differences. Regardless of the names of their conditions, Carla's approach at Movement to Wholeness starts with addressing whatever is limiting the children's brains from experiencing the variations that, in typical babies, gradually combine to become developmental functions.

Carla's work utilizes a dynamic systems approach to motor learning that has its roots in the discoveries and methods of Russian-born Israeli Moshe Feldenkrais, Ph.D. (1900-1984). Dr. Feldenkrais developed a somatic learning method that bears his name from his extensive background in physics, engineering, biomechanics, judo, and human development. (1) Anat Baniel studied and traveled with Dr. Feldenkrais in his last 11 years and assisted him at his studio in Tel Aviv and in his international professional training in Amherst, Massachusetts 1980-1983. After his death, Anat evolved her work and eventually branded it under her own name as the Anat Baniel Method of NeuroMovement.

In Carla's practice, she helps children with special needs manifest their hidden potential, become competent and confident selves, and function beyond the limitations that they were expected to have. Carla creatively uses what she learned and experienced with Feldenkrais and Anat Baniel along with important information from her original Physical Therapy training and exposure to many other approaches, tools, and techniques accumulated over her 50 year career.

The science behind everything Carla does in her practice is neuroplasticity, the capacity of the brain to change at any time in a person's lifetime. The reality of neuroplasticity was discovered and exploited by Feldenkrais in creating his method and more recently has been demonstrated repeatedly in basic neuroscience research, especially under the direction and/or authorship of Michael Merzenich, Ph.D. at University of California at San Francisco. "I believe the brain's natural capacity to repeatedly change and learn offers the only effective pathway for a child's brain to organize habits of sensing, feeling, thinking, moving, and acting more effectively despite any detrimental experiences, injuries, or genetic differences." Approaches that effectively tap neuroplasticity are subtly but profoundly different than the techniques used in most conventional rehabilitation or habilitation settings and consistently produce dramatically better outcomes for the children."

Carla uses very few tools or devices in her practice. She selects only those that augment the impact of her physical touch and movement of the children to teach them how to respond to gravity effectively. The AlertSeat is one of those few devices in her toolbox. "How can I give a child the accurate experiences of interacting effectively with gravity that are necessary to stand up?" Carla said, referring to how she uses the AlertSeat. As an example, Carla described her work with Kate (not her real name) and how the AlertSeat contributed to Kate's life and

Tunction. Born with multiple brain injuries, Kate was nine years old when she was introduced to the AlertSeat. Up to that time, Kate had never consistently brought herself into a standing position. Carla used the AlertSeat to provide Kate with experiences previously missing in her life. "The AlertSeat allowed Kate to feel how to organize herself in sitting with all the elements necessary for standing up. When Kate was placed in sitting on the AlertSeat, she responded to gravity appropriately by sitting with an erect spine, tilting her pelvis a bit forward, and grounding herself with her feet flat on the floor in a standing orientation. Every slight movement she made shifted her weight forward over her feet in various directions in the way that everyone does when starting to come up to standing. Those experiences tapped her neuroplasticity so that Kate spontaneously leaned forward and supported herself on her extended arms on the seat of a chair placed in front of her and was able to organize herself to initiate lifting her pelvis from the AlertSeat to stand up effectively for the first time. The Physical Therapist at Kate's special education school placement was surprised to find that Kate could sit independently on the AlertSeat during school activities even though Kate had previously been seated in a wheelchair supported with a seat back, waist belt, armrests, and footrests. In addition, on later occasions, Kate was able to generate spontaneous verbalizations for the first time in her interactions with a very skilled Speech Therapist while she was sitting independently on the AlertSeat during her speech therapy session."

"Every child is different," Carla stressed, "The conditions I tailored for Kate with the AlertSeat so that she stood for the first time would need to be a little different for each child but I'm certain that variations on this theme of using the AlertSeat would be very beneficial for many children with mild to moderate cerebral palsy and/or other developmental challenges." Explaining her approach, Carla said, "I have developed a process of carefully tailoring my interactions with children by precisely pacing and sequencing my speech, touch, and movement to provide the new information the children need to tap the neuroplasticity of their brains. As a result, the children spontaneously organize more effortless and effective movement, experience the thrill of feeling competent and confident, and manifest significant functional improvement in all areas of their development."