“Practice of functional activity is the most important motor learning variable”
(Schmidt & Wrisberg, 2000)

“When early intervention worked with parents and helped them learn effective ways of interacting with their children, it successfully promoted the children’s general development. When intervention did not help parents interact more effectively with their children, it had little impact on children’s developmental growth, regardless of the intensity of services the children received”
(Mahoney, Boyce, Fewell, Spiker, and Wheeden, 1998)

Successful Family Involvement

....Two Simple Rules....

1. Interventions need to fit easily into the family’s daily routines
2. Interventions need to result in some degree of success within a short time of implementation

How Long Do You Adjust for Prematurity?
Dr. Howard Needelman, Children’s Hospital, Omaha, NE

# of weeks early X 10 = # of weeks adjusted

Born at 35 week gestational age:
5 weeks early X 10 = adjust for 50 weeks or almost 1 year (11.5 mo) – based on 52 weeks in a year

Born at 26 weeks gestational age:
14 weeks early X 10 = adjust for 140 weeks or 31 months (2yr 9mo)

Born at 30 weeks gestational age:
10 weeks early X 10 = adjust for 100 weeks or 23 months (1yr 11mo)

“Ambulation patterns in children with cerebral palsy have unique personalized characteristics to allow the most energy-efficient gait available within the individual’s window of adaptable change. Working toward a ‘normal’ gait pattern that is not efficient for a particular individual will probably decrease functional abilities”
C.T. Leonard; Motor Behavior and Neural Changes Following Perinatal and Adult –Onset Brain Damage; Pediatric Physical Therapy, 1994
The quality of life for a child begins with the birth of his or her parents
Anonymous

“.....in order to develop normally, a child requires progressively more complex joint activity with one or more adults who have an irrational emotional relationship with the child. Somebody's got to be crazy about that kid. That's number one. First, last, and always.”
Urie Bronfenbrenner

Factors capable of stressing an infant’s brain to the point of permanent damage include:
- Extreme Poverty (± 1/2 Poverty Level)
- Family Violence / Child Abuse or Neglect
- Postpartum Maternal Depression
- Parental Mental Illness / Substance Abuse
- Chronic / Acute Family Stress / Marital Problems
- Emotional Deprivation

From Neurons to Neighborhoods, Shonkoff and Phillips, 2000

“During the past quarter century, there has been a shift from understanding disability narrowly, as a medical or charity issue that could only be addressed by certain professionals, to a human rights issue that seeks to dismantle socially constructed barriers.”
- National Council on Disability, 2002

“The sport, recreation and play domain, far from being trivial, is essential for fully realizing the human rights promise.”
- Hubbard, 2004

"Confining babies and young children to strollers, play pens, car and infant seats for hours at a time, may delay development such as rolling over, crawling, walking and even cognitive development. Certainly such restrictions can begin the path to sedentary preferences and childhood obesity.”
PT or OT Role as a Change Agent

1. Develop activity related goals in collaboration with the priorities of the child, family, and team to increase participation and quality of life

2. Plan activity-focused interventions by identifying environment and task modifications and adapting these to address the constraints of the child in terms of individual strength and needs

3. Integrate impairment-focused intervention with activity-focused interventions within and outside the environment context of the goal-related functional activity

4. Interact within the triad of constraints (task-environment-child) to facilitate the desired outcome of practice

Activity-Focused Motor Interventions for Children with Neurological Conditions; JoAnne Valvano; Movement Sciences, 2004 Haworth Press, p79-107

Optimal brain growth requires: “……continuous give-and-take (action and interaction) with a human partner who provides what nothing else in the world can offer, i.e., interactions that:
- are individualized to the child’s unique temperament;
- built on his or her own interests, capabilities, and initiative;
- shape the child’s self-awareness; and
- stimulate the growth of his or her heart and mind.”

From Neurons to Neighborhoods, Shonkoff and Phillips, 2000

Some clinical improvement can be expected for almost all children, despite inappropriate or nonexistent treatment.

Cioni, 2002

“It is now accepted that non-experimental evidence in the form of recalled experiences (of therapists) tends to overestimate efficacy”.

Goldstein & Harper, 2001
“Although it may be possible that parents see mild improvement which may not be detectable on formal assessment, we find this explanation unlikely and suggest that their assessment may be due to wishful thinking caused by the enthusiasm of the treatment team and the totally new approach to therapy.”

Sommerfelt et al., 2001, (Double-Blind Electrical Stim. Study)

The behavior must pass the “So What?” Test

So what if Alex can walk on a balance beam but he can’t walk up the bleachers unassisted to go to a basketball game!

So what if Mary can fold paper in halves and even quarters…. She can’t sort clothes, colors from whites, for washing!

So what if Zac can put 100 pegs in a board in less than 10 minutes while in his seat with 95% accuracy….. He can’t put quarters in vending machines!

Preston Lewis, Kentucky Dept. of Ed.