

EVIDENCE THAT EARLY INTERVENTION REALLY WORKS.

According to the US Department of Education, after nearly 50 years of research, there is both quantitative (data-based) and qualitative (reports of parents and teachers) evidence that early intervention increases the developmental and educational gains for the child, improves the functioning of the family and reaps long-term benefits for society. Early intervention has been shown to result in the child:

- ◆ Needing fewer special education and other habilitative services later in life;

- ◆ Being retained in a grade level less often; and
- ◆ In some cases being indistinguishable from classmates without special needs years after intervention.

The available data emphasize the long-term cost effectiveness of early intervention. Many studies and literature reviews report that the earlier the intervention, the more effective it is. With intervention at birth or soon after the diagnosis of a disability or high risk factors, the developmental gains are greater and the likelihood of developing problems is reduced.

AVAILABLE DATA

» The Committee on Children with Disabilities Policy Statement (1994) *Pediatrics*, 93(5), 863-65, concluded that early identification of children with disabilities through screening can lead to effective therapies that may reverse or ameliorate conditions and improve family functioning.

» McLean, L.K. and Cripe, J.W. (1997) stated in their article, "The effectiveness of early intervention for children with communication disorders." In M.J. Guralnick (Ed.), *The Effectiveness of Early Intervention* (pp. 349-428), the researchers showed that of the 56 studies they reviewed, early intervention for different communication disorders can be very effective in eliminating or mitigating the level of delay.

» In the absence of formal intervention, there is a general decline in performance on developmental measures for children with a variety of cognitive disabilities, such as Down syndrome, across the first five years of life. (Shonkoff, J. & Phillips, D. (Eds.) (2000). National Research Council and Institute of Medicine: *From Neurons to Neighborhoods*. Washington, DC: National Academy Press.)

» Infants with hearing impairment identified after six months of age had lower language scores than those who were identified prior to six months of age. The developmental disadvantage for the later-identified group became more pronounced as the children aged; at three years of age, the language scores for the later-identified children were 10 months behind those of the children identified before six months of age. (Yoshinaga-Itano, C.; Sedy, A.; Coulter, D.; et al. Language of early and later-identified children with hearing loss. *Pediatrics* 102(5):1161-1171, 1998. PubMed; PMID 9794949.)

» Infants and toddlers who score in the at-risk range of developmental functioning (i.e., below the mean of national norms) and do not receive services frequently move into the lowest functioning at-risk group (i.e., mental retardation) as they get older (Mathematica Policy Research, Inc. & Columbia University's Center for Children and Families at Teacher's College, 2002).

» Children in low-income families who receive early educational intervention starting in infancy have higher scores on mental, reading and math tests than children who don't receive the intervention and, more importantly, these effects have been shown to persist until at least age 21 (Campbell, F.A.; Ramey, C.T.; Pungello, E.P.; Sparling, J.; & Miller-Johnson, S. (2002). Early Childhood Education: Young Adult Outcomes from the Abecedarian Project. *Applied Developmental Science*, 6, 42-57).

» Children with severe hearing loss who receive both home-based services and preschool intervention do substantially better than those who receive only center-based services or do not receive any intervention prior to school entry. The effects for reading, arithmetic, vocabulary, speech articulation, percent of the child's communication understood by non-family members, social adjustment and behavior show that children who receive the most intensive early intervention perform 20-45 percentile points higher than children who do not receive such intervention (White, K. R. (1997). Universal Newborn Hearing Screening: Issues and Evidence. Atlanta, GA: Workshop on Early Hearing Detection and Intervention (EHD), October 22, 1997. Atlanta, GA: Centers for Disease Control and Prevention). Corroborated by a more recent study (Yoshinaga-Itano, C.; Sedey, A.L.; Coulter, D.K.; & Mehl, A.L. (1998). Language of early and later-identified children with hearing loss. *Pediatrics*, 102(5), 1161-1171).

» Siegel, D.J. (1999). *The Developing Mind: Toward a Neurobiology of Interpersonal Experience*. New York, NY: The Guilford Press. This is an in-depth look at the neurodevelopmental process of the brain, including the biology of memory, attachment, emotion, modes of processing, states of mind, self-regulation, interpersonal connections and integration. Since the brain is undergoing rapid, experience-dependent development for the first several years of life, this suggests that intervention will be most influential on the neuroanatomy of the brain if provided early.

Family Infant
Toddler
Program

FIT
Program
Works