



### **1) Nature of the intervention:**

The Early Start Denver Model (ESDM) approach incorporates the empirical knowledge-base of infant-toddler learning and development and the effects of early autism. ESDM intervention is provided in the home, school, and in the community by trained ESDM therapists during natural play and daily routines. ESDM is a relationship-based intervention, and meets the parent and family involvement recommendation of the National Research Council for best practices in early autism intervention (National Research Council, 2001). The aim is to increase the rates of the development in all domains for children with ASD as it simultaneously aims to decrease the symptoms of autism. In particular, this intervention focuses on boosting children's social-emotional, cognitive, and language, as development in these domains is particularly affected by autism. ESDM also uses a data based approach and empirically supported teaching practices that have been found effective from research in applied behavior analysis. ESDM fuses behavioral, relationship-based, and a developmental, play-based approach into an integrated whole that is completely individualized and yet standardized.

### **2) Training details:**

The training is comprised of 2 courses. These courses are delivered in various site locations and span across four days. The Introductory Course addresses the main aspects of the ESDM but is not intended to train professionals to fidelity. In this course participants learn about the background, principles, assessment, data, and intervention procedures of the ESDM. The Advanced Course offers direct practice in the curriculum administration and delivery of the ESDM intervention, fidelity scoring, and data management systems. The Advanced Course includes interactive sessions with children with ASD in order to equip professionals with the information, skills, and resources necessary to correctly implement the ESDM within their organization. Professionals will be required to submit follow-up training materials to demonstrate their continued competency in the ESDM following the Advanced Training Course.

#### **a. Trainer:**

ESDM Certified trainers provide ESDM training activities. They themselves have achieved certification in ESDM therapy and trainer level ESDM requirements.

#### **b. Trainees:**

The Introductory level course can accommodate up to 125 people. The requirements are as follows

- Work regularly with 12-48 month aged children with Autism Spectrum Disorder (ASD);
- Have educational degrees beyond a bachelor's or the academic equivalent from your country of origin (e.g., MA, Ph.D., MFT, SLP, OT);
- Work as part of an interdisciplinary team (e.g., general/special education teacher, developmental/clinical psychologist, SLP, OT, behavior analyst) \*\*
- Have read the ESDM Manual and can bring their own copy to the workshops;
- Have the resources to submit training materials (after the workshop is complete) to our center for fidelity review and certification.

Trainees need to participate in an Introductory course and need the previous listed requirements and. The advanced course can accommodate teams of 3-5 professionals, with a ratio of one ESDM certified trainer for the team. During this course, coaching and feedback will be provided on how to generate and embed a developmentally appropriate teaching curriculum into naturalistic routines for young children with ASD.



Requested materials are submitted to ESDM certified trainers, according to an outlined timeline. The submissions are then evaluated according to the: (1) developmental appropriateness of Curriculum scoring, selected objectives, and progression of teaching steps, and (2) accuracy of fidelity and data scoring from videotaped samples. Written feedback of recommendations in each area is provided by the trainer. Information will be then be shared on whether certification in the ESDM direct delivery phase has been met. The entirety of this process should not exceed 9 months.

**c. Frequency and location of training:**

Please monitor our website, under upcoming events to view upcoming training events.

[www.ucdmc.ucdavis.edu/mindinstitute/research/esdm/events.html](http://www.ucdmc.ucdavis.edu/mindinstitute/research/esdm/events.html)

**d. Train the trainer:**

Those seeking Certified Trainer status must have completed their Therapist Certification and have practiced ESDM with a variety of children before becoming a trainer.

**Step One:**

- The Apprentice Trainer will partner with a Certified Trainer to conduct the Introductory Course and co-teach up to five participants in the Advanced Course. The Apprentice Trainer will receive active supervision and coaching from the Certified Trainer.

**Step Two:**

- The Apprentice Trainer will coach two Trainees to fidelity in ESDM, through all the steps of becoming a credentialed ESDM Therapist. It is the paper work and therapy videos that these two Trainees provide that will be coded by the Apprentice Trainer and the Certified Trainer to determine Trainer status of the Apprentice. The Certified Trainer will supervise and provide feedback to the Apprentice Trainer as needed in order to help with the coaching of the two Trainees.
- Completion of all requirements for Therapist Certification of these two Trainees, rated by the ESDM Certified Trainer, results in the Certification of the Apprentice as an ESDM Trainer.

**e. Manual:**

The training manual entitled, The Early Start Denver Model for Young Children with Autism: Promoting Language, Learning, and Engagement. The manual describes a developmental, naturalistic, and relationship-based approach for fostering children’s initiative and engagement and scaffolding their communication and interaction. Also included is the fidelity system for determining correct usage of the interactive procedures and a non-reproducible reference of the Curriculum Checklist for evaluation of children’s skill levels and development of teaching objectives. The [manual](#) and [Curriculum Checklist](#) (sold separately) can be purchased online.

The parent Handbook, In An Early Start for Your Child with Autism, Drs. Dawson and Rogers, together with Laurie Vismara, Ph.D., translate the Early Start Denver Model approach into step-by-step strategies for parents and other caregivers. This handbook includes techniques that fit into family routines and are compatible with professionally delivered behavioral interventions for autism spectrum disorders. The goal is to promote learning, play, communication and social engagement through activities in the home and community.



### 3) Evidence-base for the intervention:

The ESDM approach to intervention is built upon the combination of several different approaches to the treatment of autism in young children, including: 1) the Denver Model; 2) Roger's and Pennington's Model of Interpersonal Development in Autism; 3) Dawson's social motivation hypothesis of autism; and 4) pivotal-response training (PRT). The first influence of ESDM, the Denver Model, was created in the 1980s and was a developmental approach for preschoolers from two- to five-years of age with autism (Rogers et al., 1986). The core features of the Denver Model that are retained in the ESDM include: a) an interdisciplinary team that implements a developmental curriculum addressing all domains for each child's individual needs; b) a focus on interpersonal interactions and engagement; c) a focus on reciprocal, functional and spontaneous use of imitation, facial expressions, and objects; d) an emphasis on verbal and nonverbal communication; e) a focus on the cognitive aspects of play; and f) the importance of developing partnership with parents (Dawson & Rogers, 2010, p. 15). Second, the ESDM also has a strong focus on the importance of helping young infants with autism learn to imitate the people in their world, which stems from Roger and Pennington's hypothesis that it is the lack of ability to imitate that influences the child with autism's ability to synchronize and coordinate with their caregiver, which in turn affects their ability to share emotions and understand another's point of view (Rogers & Pennington, 1991). Third, the ESDM works to increase the social motivation for children with ASD, in order to increase the child's time spent focusing on other's actions, facial expressions, and communications (Dawson et al., 2004). Increasing social motivation can greatly increase the child's social, emotional, and language development by providing many more opportunities for young children to engage in these types of learning experiences. Fourth, ESDM incorporates PRT and other Applied Behavior Analysis (ABA) practices into its curriculum. PRT is based on the principles of ABA and includes learning opportunities motivated by child choice and shared control of the materials. Each learning opportunity balances new skills with the maintenance of previously learned skills (Koegel et al., 1999). The ESDM is an integrated combination that takes the strengths of previously developed ASD interventions and theories and combines them with a developmental focus to best meet the needs of toddlers with ASD.

In a randomized, controlled trial to evaluate the efficacy of the ESDM, forty-eight children diagnosed with ASD between 18 and 30 months were randomly assigned to either the ESDM group, or the community treatment group (Dawson et al., 2010). The children in the ESDM group received intervention by trained therapists for two-hour sessions, twice per day for five days a week for two years (on average 15.2 hours per week of ESDM and 5.2 hours of additional community therapy per week). In addition, parents were trained and were asked to use ESDM strategies during daily activities (reporting on average 16 hours per week). The community control group reported receiving an average of 9.1 hours per week of individual therapy and an average of 9.3 hours per week of group intervention, such as inclusive preschool programs. At the end of the two-year period, children in the ESDM group showed significant improvements in IQ, language, and adaptive behavior when compared to children who had received treatment from the community, even though the groups differed little on the average number of hours of intervention received over the two-year period. Children who received the ESDM intervention were significantly more likely to have improved diagnostic status than the children in the community treatment group. These results give parents of even the youngest children with ASD hope for their children's futures.

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#### 4) Provisions for cultural adaptation:

The ESDM manual, curriculum, and parent handbook are translated and being translated into a variety of languages. ESDM training activities have occurred and are occurring nationwide and internationally.

#### 5) Contact information:

Please contact the ESDM Training Manager, Megan Devitt, M.A.: (916) 703-0465 or [megan.devitt@ucdmc.ucdavis.edu](mailto:megan.devitt@ucdmc.ucdavis.edu) for more information.