

YOUNG CHILDREN'S NATURAL LEARNING ENVIRONMENTS:
CONTRASTING APPROACHES TO EARLY CHILDHOOD
INTERVENTION INDICATE DIFFERENTIAL
LEARNING OPPORTUNITIES¹

CARL J. DUNST

*Orelena Hawks Puckett Institute
Asheville, North Carolina*

MARY BETH BRUDER

*University of Connecticut Health Center
Farmington, Connecticut*

CAROL M. TRIVETTE AND DEBORAH W. HAMBY

*Orelena Hawks Puckett Institute
Morganton, North Carolina*

Summary.—1,000 parents of infants and toddlers enrolled in early childhood intervention programs were surveyed about the number of learning opportunities provided their preschool children using different approaches to early intervention. Findings showed that more learning opportunities were reported when participation in everyday activity settings was conceptualized as a type of intervention rather than as settings for professionals to conduct their interventions.

The experiences young children have as part of everyday life provide learning opportunities that may enhance or impede development depending upon their features (Bronfenbrenner, 1999). According to Dunst, Hamby, Trivette, Raab, and Bruder (2000), the everyday activities making up the fabric of daily life are the contexts for children's *natural learning opportunities* which influence their behavior and development. These everyday activities include such things as playing in a puddle of water, bedtime stories, dressing and undressing, caring for pets, meal times, cleaning up, children's bath times, and so forth.

Bronfenbrenner (1999) contended that everyday learning opportunities are more likely to enhance development if they "take place on a fairly regular basis" (p. 6) for a child to practice and learn emerging skills. The purpose of this study was to assess whether parents thought their children experienced different numbers of learning opportunities depending on how everyday activities were used as contexts for child learning.

The study was conducted as part of a line of research and practice investigating the characteristics of natural environments that maximize learning

¹This research was supported by cooperative agreements with the U.S. Department of Education, Office of Special Education Programs, Research to Practice Division (H024S96008, H24L990002). Send correspondence to Carl J. Dunst, Ph.D., Orelena Hawks Puckett Institute, 18A Regent Park Blvd., Asheville, NC 28806 or e-mail (dunst@puckett.org).

opportunities for young children with developmental disabilities or delays and which have optimal development-enhancing consequences (Dunst & Bruder, 1999). *Natural environments* is the term used in the Individuals With Disabilities Education Act (1997) to refer to settings natural or typical for infants and toddlers without developmental disabilities or delays and which are the contexts of learning opportunities that occur either naturally or as a result of professional interventions.

METHOD

The participants were 1,000 parents and other caregivers of infants and toddlers birth to three years of age participating in early childhood intervention programs in most ($N=45$) of the United States. The sample was made up of two groups of participants; one group ($N=660$) was asked to indicate the extent to which everyday family and community activities were used as children's learning opportunities (*Activity Settings as Early Intervention*), and the other group ($N=340$) was asked to indicate the extent to which early childhood professionals implemented their practices in everyday activities (*Early Intervention in Activity Settings*).

Participants completed surveys that included five family activities (meal times, dressing and undressing, playing outside around the house, children's bath times, and family picnics) and five community activities (food shopping, neighborhood playgrounds, library or bookstore story hours, neighborhood walks, and visiting a community park or pond) items. The survey question asking respondents to indicate the extent to which early intervention was implemented in activity settings was stated as follows: "How often do the early intervention staff working with your child do their work in the following settings or locations?" The question of the extent to which activity settings were used for children's learning opportunities was stated as "How often is each of the following activities a setting in which your child's learning takes place?"

The items on both versions of the scales were rated on a 5-point scale anchored by 1: never and 5: always/almost always a context for early childhood intervention or child learning. The sum of the ratings for the items describing family activity settings ($\alpha_s = .64$ and $.70$) and the sum of the ratings of the items describing community activity settings ($\alpha_s = .68$ and $.78$) were used as the measures of number of everyday learning opportunities.

RESULTS

The table shows the means and standard deviations for the different approaches to using everyday activities as children's learning opportunities. There were significant differences between the types of practice for both the family and community activity measures. Parents' reported more child learning opportunities when participation in activity settings was conceptualized

as a form of early childhood intervention rather than as settings in which professionals implemented services. The standardized effect sizes (Cohen *d*) for the contrasting types of practices were very large, indicating that the differences between measures of the learning opportunities for the two types of practices were essentially nonoverlapping.

TABLE 1
MEANS AND STANDARD DEVIATIONS FOR MEASURES OF DIFFERENT EVERYDAY ACTIVITY SETTINGS

Type of Setting	Type of Practice					Cohen <i>d</i> Effect Size
	Activity Settings as Early Intervention		Early Intervention in Activity Settings		Between Type of Practice	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> _{1,998}	
Everyday family activities	18.5	3.4	7.7	3.4	2288.66*	3.19
Everyday community activities	13.8	4.2	7.1	3.4	669.26*	1.78

**p* < .0001.

DISCUSSION

Findings showed that parents reported their children experienced significantly more learning opportunities when they rated children's participation in everyday activities versus professionals implementing their services in everyday activities. These results indicate that operationalizing natural environments as places where early intervention professionals implement services provide children limited learning opportunities (see McWilliam, 2000) in some ways inconsistent with Bronfenbrenner's statement (1999) that learning opportunities need to occur frequently and regularly if positive developmental benefits are to be realized.

Results indicate that caution is warranted in terms of how the natural environment provision of the Individuals With Disabilities Education Act (1997) Early Intervention Program is conceptualized and implemented. More specifically, interpreting natural environments as settings in which early intervention services are implemented is not likely to provide sufficient numbers of learning opportunities. The fact that it matters how natural environments are conceptualized and implemented is best understood by considering findings of studies examining the effects of the two approaches to early childhood intervention as done here. Whereas using everyday learning opportunities as natural environments is associated with positive benefits for young children and their parents (e.g., Dunst, Bruder, Trivette, Hamby, Raab, & McLean, 2001; Trivette, Dunst, & Hamby, 2004; Dunst, Bruder, Trivette, & Hamby, in press), implementing early intervention services in everyday activities has no positive effects and in some cases has negative effects on children's and parents' functioning (Dunst, *et al.*, in press).

Present findings can inform practice by influencing the ways in which

the IDEA natural environment provision is translated into the day-to-day practices of early childhood educators and therapists. More specifically, more learning opportunities are likely to be provided young children with disabilities when increased participation in everyday family and community activity is conceptualized as an early childhood intervention practice.

REFERENCES

- BRONFENBRENNER, U. (1999) Environments in developmental perspective: theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environment across the life span: emerging methods and concepts*. Washington, DC: American Psychological Association. Pp. 3-28.
- DUNST, C. J., & BRUDER, M. B. (1999) Family and community activity settings, natural learning environments, and children's learning opportunities. *Children's Learning Opportunities Report*, 1(2), 1-2.
- DUNST, C. J., BRUDER, M. B., TRIVETTE, C. M., HAMBY, D., RAAB, M., & MCLEAN, M. (2001) Characteristics and consequences of everyday natural learning opportunities. *Topics in Early Childhood Special Education*, 21, 68-92.
- DUNST, C. J., BRUDER, M. B., TRIVETTE, C. M., & HAMBY, D. W. (in press) Everyday activity settings, natural learning environments, and early intervention practices. *Journal of Policy and Practice in Intellectual Disabilities*.
- DUNST, C. J., HAMBY, D., TRIVETTE, C. M., RAAB, M., & BRUDER, M. B. (2000) Everyday family and community life and children's naturally occurring learning opportunities. *Journal of Early Intervention*, 23, 151-164.
- INDIVIDUALS WITH DISABILITIES EDUCATION ACT [IDEA]. Amendments, 20 U.S.C. §1400 *et seq.* (1997)
- MCWILLIAM, R. A. (2000) It's only natural . . . to have early intervention in the environments where it's needed. *Young Exceptional Children Monograph Series No. 2: Natural Environments and Inclusion*, 2, 17-26.
- TRIVETTE, C. M., DUNST, C. J., & HAMBY, D. (2004) Sources of variation in and consequences of everyday activity settings on child and parenting functioning. *Perspectives in Education*, 22(2), 17-35.

Accepted January 28, 2005.