Parent-Mediated Everyday Child Learning Opportunities: I. Foundations and Operationalization

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ABSTRACT

This *CASEinPoint* includes a description of the theoretical, operational, and research foundations of an approach to early childhood intervention called *Contextually Mediated Practices* or *CMP*. CMP uses everyday family and community activities as sources of natural learning opportunities and child interests as the basis for parent-mediated child participation and learning in those activities. The goals of CMP are increased child participation in everyday activities and enhanced child and parent confidence and competence as a result of the everyday learning opportunities.

INTRODUCTION

The purpose of this *CASEinPoint* is to describe an approach to early childhood intervention that uses every-day family and community activities as sources of natural learning opportunities and child interests as the basis for promoting child participation in those activities. This is accomplished by parents or other caregivers mediating interest-based child learning in everyday activities having *development-instigating characteristics and development-enhancing consequences* (Bronfenbrenner, 1992; Dunst, Bruder, Trivette, Hamby et al., 2001).

The term *mediated* is used in this paper to specifically mean any number of techniques, strategies, and practices parents or other caregivers use to provide and increase children's learning opportunities in ways that support and strengthen both child and parent competence and confidence. Mediation includes any behavior or action that is purposefully and intentionally used by a parent for engaging a child in interest-based learning opportunities. This includes, but is not limited to, parents' recognition and acknowledgement of their children's interests and strengths, the use of this information for choosing everyday activities that provide contexts for interest and competence expression, and parent responsiveness to and encouragement of child competence, exploration, and mastery in the context of everyday activity. Parentmediated child learning is considered optimally effective when parents' as well as children's confidence and competence is strengthened as a result of interest-based, everyday learning opportunities.

The approach to early childhood intervention constituting the focus of this paper places major emphasis on parent-implemented practices where *practitioners* support and strengthen parents' capacity to provide their

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children interest-based everyday learning opportunities. This approach to early childhood intervention is based on the simple fact that practitioner implemented interventions that include little or no parent involvement in children's learning account for so small an amount of intervention or therapy that the potential effectiveness of the practices is highly questionable (McWilliam, 2000).

Some simple calculations indicate that twice-a-week hourly intervention or therapy in the absence of parent involvement accounts for only 2% of the total waking hours of a one-year-old child (Roffwarg, Muzio, & Dement, 1966), hardly enough time for any kind of intervention to make a meaningful difference in a child's life. In contrast, each and every daily activity (feeding, diaper changing, bathing, parent/child lap games, etc.) making up the fabric of a child's life is experienced at least 2000 times during the first year of a child's life (Ferrier, 1978). Just 20 everyday activities would provide some 40,000 learning opportunities by age one. Research indicates that preschoolers participate, on average, in about 50 different kinds of everyday activity (Dunst, Bruder, Trivette, Raab, & McLean, 1998). This translates into 100,000 learning opportunities each year of a child's life not counting the multiple learning opportunities that are afforded within any single activity. Assuming that any one activity provides only five learning opportunities, the number of times a child has opportunities to practice existing and learn new skills would total 500,000!

This CASEinPoint includes a description of the conceptual, operational, and research foundations of an approach to early intervention called Contextually Mediated Practices or CMP. A companion paper (Dunst, 2006) includes descriptions of the methods and procedures for implementing CMP. The reader is referred to Dunst, Bruder, Trivette, Raab, and McLean (2001), Dunst, Herter, and Shields (2000), Raab (2005a, 2005b), Raab and Dunst (2005), and Roper et al. (2005) for related papers on implementing Contextually Mediated Practices.

DEFINITION OF CONTEXTUALLY MEDIATED PRACTICES

Contextually Mediated Practices are defined as the provision of interest-based child learning opportunities as part of everyday family and community activities by parents (and other primary caregivers) where parent responsiveness and encouragement are used to support child learning and the development of socially-adaptive, functional capabilities. Parents' and other primary caregivers' knowledge and recognition of their children's interests and strengths, and how everyday activities can be used as contexts for interest-based child learning, are central features of CMP. The goal of this approach to early childhood intervention is child involvement in a broad range of interest-based everyday activities and learning opportunities strengthening existing abilities and enhancing acquisition of new competence furthering

child participation in functional, socially adaptive, and culturally meaningful activity.

Foundations

CMP is based on theory and research about the sources of everyday child learning opportunities, how child participation in everyday activities is shaped and influenced by the characteristics of the activities, and the roles parents and other primary caregivers play in promoting child learning in everyday activities. The conceptual foundations of CMP are activity theory (Göncü, 1999), ecological theory (Bronfenbrenner, 1992, 1999), parenting theory (Bornstein, 1991), cultural psychology (Cole, 1996; Cole, Engeström, & Vasquez, 1997), and interest theory (Renninger, Hidi, & Krapp, 1992). Bronfenbrenner's (1992, 1993) analysis of the person and environment factors influencing child learning and development are central to the foundations for how CMP is conceptualized and operationalized.

According to Bronfenbrenner (1992), child learning and development are influenced by both the personal characteristics of a developing person and the characteristics of social and nonsocial environments that this person experiences as part of everyday life. Bronfenbrenner (1993) also notes that the "personal characteristics likely to be most potent in affecting the course...of development...are those that set in motion, sustain, and encourage processes of interaction between the [developing] person and two aspects of the proximal environment: first, the people present in the setting; and second, the physical and symbolic features of the setting that invite, permit, or inhibit engagement in sustained, progressively more complex interaction with [people] and an activity in the immediate environment" (p. 15).

Figure 1 shows Bronfenbrenner's tripartite model specifically in terms of the key features of CMP. Accordingly, any one everyday activity (e.g., parent/child book reading) will invite, encourage, and sustain child engagement and competence expression to the extent that the activity is interest-based and a parent supports and encourages interest and competence expression in the activity. The likelihood that an everyday learning opportunity will have optimal positive benefits is realized when all three qualities or characteristics are present simultaneously.

CONTEXTUALLY MEDIATED PRACTICES MODEL

Figure 2 shows the CMP model which includes four practice components (everyday activity settings, child interests, increased child learning opportunities, and parent-mediated child learning) and two major types of outcomes (activity setting participation and increased competence). The CMP model is used to structure and promote parents' abilities to mediate children's participation in everyday

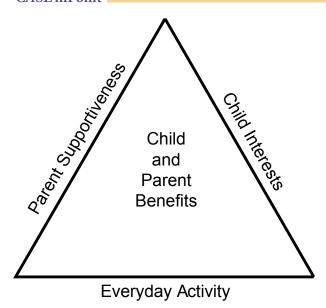


Figure 1. Three sets of person (child interests) and environment (everyday activity & parent supportiveness) factors contributing to child and parent benefits of Contextually Mediated Practices.

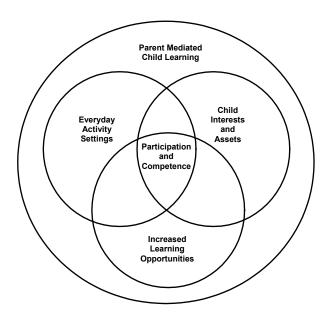


Figure 2. Major components of the contextually mediated practices model for providing young children interest-based everyday learning opportunities.

interest-based activities increasing the *number*, *frequency*, and *quality* of child learning opportunities (Dunst, 2006). Stated differently, the CMP model provides a foundation for parents to become more aware and capable of providing their children a rich mix of learning opportunities as part of everyday life that are interesting,

engaging, and motivating to their children, and which provide the children opportunities to practice existing abilities, learn new skills, and explore and learn about their own capabilities as well as the propensities of others (e.g., the dependability of adults in the child's life).

Everyday Activity Settings

Tharp and Gallimore (1988) defined everyday activity settings as the "contexts in which collaborative interaction, intersubjectivity, assisted performance, and learning occurs" (p. 72). Farver (1999) noted that "activity settings are made up of everyday experiences...[that]... contain ordinary settings in which children's social interaction and behavior occurs. They are the who, what, where, when, and why of daily life" (p. 201). According to Gallimore and Goldenberg (1993), "Children's activity settings are the architecture of their everyday life and the *context* of their development" (p. 315).

Activity settings making up the fabric of family life include such things as dressing and undressing, eating meals, brushing teeth, taking care of pets, getting ready for bed, rough housing, parent/child play episodes, household chores, and so forth (Dunst & Hamby, 1999b; Dunst, Hamby, Trivette, Raab, & Bruder, 2000; Gallimore, Weisner, Bernheimer, Guthrie, & Nihira, 1993; Gallimore, Weisner, Kaufman, & Bernheimer, 1989; Lamb, Leyendecker, Schölmerich, & Fracasso, 1998; Tudge et al., 1999). Activity settings occurring in the context of community life include car, subway, or bus rides; eating out; neighborhood walks; hiking; library story time hours; play groups; feeding ducks or fish at the community pond; restaurant play lands; and so forth (Beckman et al., 1998; Dunst, 2000; Dunst & Hamby, 1999a; Dunst, Hamby et al., 2000; Gallimore, Goldenberg, & Weisner, 1993; Hatcher & Beck, 1997).

Research on the everyday activities of infants, toddlers, and preschoolers (both typically developing and those with or at risk for delays) indicates that natural learning opportunities are a mix of planned and unplanned. structured and unstructured, and intentional and serendipitous life experiences (Dunst, Hamby et al., 2000). Going to a twice-a-week parent/child play group is an example of a planned activity. Happening upon and getting to pet a puppy on a neighborhood walk is an example of an unplanned activity. Taking swimming lessons is an example of a structured activity. Kicking a soccer ball around the backyard is an example of an unstructured activity. Having a child brush his teeth after eating a meal or snack is an example of an intentional activity. Getting to splash in a puddle of water after a rainstorm is an example of a serendipitous learning activity. The fact that everyday learning opportunities are a mix of many different kinds of ordinary life experiences makes activity setting the preferred term for conceptualizing, operationalizing, and describing the everyday natural learning opportunities afforded young children in these settings (Dunst, Trivette, Humphries, Raab, & Roper, 2001).

Learning opportunities afforded young children can be either contextualized or decontextualized (Lave, 1996). CMP places major emphasis on contextualized learning because "real-life" learning opportunities are the basis for children to acquire a sense of their own capabilities and the propensities of people and objects (Bower, 1997; Fogel, 1997; Goldberg, 1977; Lamb, 1981). Contextualized learning is best understood as the everyday experiences enabling child participation in interactions with people and objects fostering acquisition of socially-adaptive and culturally meaningful behavior (Göncü, 1999) where the participatory experiences provide a child opportunities to practice existing abilities and learn new competencies that are functionally adaptive (Wolery, 1989).

The difference between contextualized and decontextualized learning opportunities is illustrated by the following examples. A child walking up or down steps in order to go outside to play is an example of a contextual learning opportunity, whereas a child repeatedly going up or down steps to "practice weight shifting" is an example of a noncontextual learning opportunity. A child using gestures, signs, or words to request something to eat at mealtimes is an example of a contextual learning opportunity, whereas a child repeating the words for foods shown in pictures or on flash cards is an example of a noncontextual learning opportunity. A child getting an adult to play pat-a-cake by pushing her hands together is an example of a contextual learning opportunity, whereas having a child repeatedly imitate gestures or repeatedly make hand or arm movements is an example of a noncontextual learning opportunity. A child making swimming strokes or "doggy paddling" as part of taking swimming lessons is an example of a contextualized learning opportunity, whereas doing range-of-motion exercises while in a swimming pool is an example of a noncontextualized learning opportunity.

The distinction between contextualized and decontextualized learning helps clarify when experiences afforded young children are and are not the kinds of everyday natural learning opportunities that are most valued and desired. Simply stated, learning opportunities provided in the context of everyday activity settings are the most desired natural learning opportunities when the learning itself is functional and socially adaptive. Consequently, "moving" decontextualized learning opportunities out of clinics or other non-normative places into family and community activity settings does not make the change in location natural learning opportunities. The same is the case when implementing noncontextual therapy or intervention in everyday activity settings. For example, research findings from several studies comparing and contrasting the consequences of contextualized vs. decontextualized therapy and intervention indicate that using everyday activities as sources of child learning opportunities has positive child and parent benefits, whereas implementing more traditional therapy and interventions in everyday family and community activity has either little or no benefits or negative consequences on child and parent functioning (Dunst, Bruder, Trivette, & Hamby, 2006; Dunst, Trivette, Hamby, & Bruder, in press).

Child Interests

Interests include the likes, preferences, favorites, strengths, assets, etc. that motivate people in general, and children more specifically, to engage and participate in desired activities providing contexts for interest and competence expression. Interests can be either a person or environment characteristic (Krapp, Hidi, & Renninger, 1992; Raab, 2005b). Personal interests are a child's personal or individual likes, preferences, favorites, strengths, and so forth. They are person factors that encourage and sustain child engagement and participation in desired and appealing activity. Situational interests are those aspects of social and nonsocial environments that attract child attention, curiosity, and engagement in interactions with people and objects. They are *environmental factors* characterized by the *interestingness* of people, events, and things. According to Renninger et al. (1992), both personal and situational interests influence child learning and development. Research shows that both types of interest-based child learning opportunities are associated with increased positive and decreased negative child behavior and functioning (Raab & Dunst, in press).

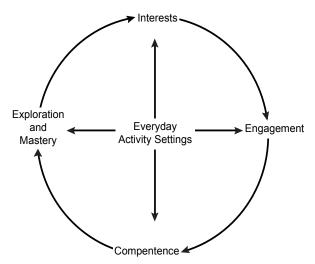


Figure 3. Everyday activity settings as sources of interest-based and competence-enhancing everyday natural learning opportunities.

Figure 3 shows a framework that has been found useful for capturing key features of everyday learning opportunities that mirror what we know from available research. The foundation of the model is interest-based learning opportunities. Research indicates that children's learning is enhanced when their interests engage them

in social and nonsocial interactions with people and objects that provide opportunities to practice existing skills, explore their environments, and learn and master new abilities (Raab & Dunst, in press). Nelson (1999), for example, found that variations in the development of children's language competence were "related easily to the child's life activities and interests" (p. 2). Similarly, Guberman (1999) noted, "children's own interests and sense-making processes [are] a central formulation of supportive [learning] environments" (p. 207).

The way in which interests function as either a person or environment factor (Bronfenbrenner, 1993; Wachs, 2000) influencing child learning and development can be explained as follows. People, objects, and events that are interesting to children are the things that capture and maintain their attention (Fogel, 1997), encourage them to interact with people and objects (Rusher, Cross, & Ware, 1995), and promote participation in social and nonsocial activities (Göncü, Tuermer, Jain, & Johnson, 1999). Interest-based playing, interaction, and exploration provide the foundation for child engagement (McWilliam & Ware, 1994). When children are engaged in everyday activities they provide opportunities to practice existing abilities, perfect emerging skills, and acquire new competence (Farver, 1999). Everyday activities that afford children opportunities to express competence are ones that are more likely to encourage and support exploration (Wachs, 1979). Through exploration, children come to learn the relationship between their behavior and its consequences, both enhancing and strengthening their sense of mastery (MacTurk & Morgan, 1995). A sense of mastery in turn is likely to reinforce existing and promote the development of new interests.

Increasing Child Learning Opportunities

Activity settings can only have positive effects on learning and development if children have a sufficient number of opportunities to participate in different kinds of social and nonsocial settings having development-instigating and development-enhancing qualities (Bronfenbrenner, 1992, 1993). According to Bronfenbrenner (1999), "For development to occur, the [developing person must engage in activity...and the activity must take place on a fairly regular basis" (pp. 5-6). The importance of opportunity derives from the simple fact that engagement in everyday activity provides a child opportunities to practice existing capabilities as well as learn new capabilities (Bourdieu, 1977; Lave, 1996). Consequently, increasing opportunities for children to participate in interest-based everyday activity is a primary focus of CMP.

The opportunity to participate in everyday activity is now generally recognized as an important aspect of effective early childhood intervention practices (e.g., Duchan, 1997; Dunst, 2001; Dunst, Bruder, Trivette,

Hamby et al., 2001; Kellegrew, 1998; Law et al., 1998). For example, Duchan (1997) noted that the "goals of a situated [contextual] approach to [therapy and intervention] focuses on increasing opportunities for...a child to participate in everyday-life activities" (p. 10).

According to Kellegrew (1998), participation in everyday activity requires simultaneous attention to two aspects of early childhood intervention: opportunity and ability--where the relationship between opportunity and ability is bidirectional and interdependent. Opportunity refers to the variety of everyday experiences and activity providing the contexts for expressing existing abilities and learning new competence. Ability refers to the behavior, skills, and competence that are strengthened or learned, and permit increased child participation in everyday family and community activity. Opportunity provides a context for competence expression, and improved ability provides children the skills necessary for child-initiated activity.

Child learning opportunities can be increased by both participation in different kinds of interest-based everyday activity and by the number of learning opportunities afforded within any one activity setting. Take, for example, a child who enjoys playing in water. Getting to play in water during bath time, using a hose to water plants and flowers, splashing in a puddle of water, and dropping pebbles in a stream or pond, are examples of interest-based participation in different kinds of everyday activity. Splashing in a wading pool, floating things in the pool, filling and emptying a bucket of water, and pretending to swim, are examples of different kinds of interest-based learning opportunities in the same activity setting. Increasing the breadth and depth of interest-based everyday activities is a major focus of CMP. Findings from one of our studies indicated that frequent participation in a wide range of everyday family and community activities was associated with both child and parent benefits (Trivette, Dunst, & Hamby,

Parent-Mediated Child Learning

Parent-mediated child learning involves the *intentional* use of different methods, techniques, and strategies for recognizing, identifying, and acknowledging child interests, strengths, and assets; using this information for engaging children in everyday learning activities; and encouraging and supporting children's learning and competence expression in the context of the everyday activities. This is accomplished using a number of different assessment and intervention practices as part of implementing CMP (Dunst, 2006). CMP is most likely to benefit both a child and parent when a parent is a primary or principal agent providing their child interest-based everyday learning opportunities. Research indicates, for example, that parenting competence is strengthened when parents use everyday

activities as sources of child learning opportunities and children demonstrate positive functioning in the activities (Dunst, Bruder et al., 2006).

Mediation includes three different components or processes: Planning, implementation, and evaluation. *Planning* involves child interest identification and decisions about which everyday activities are best suited for interest-based child learning. *Implementation* involves efforts to increase child participation in different activity settings and what parents do to support and encourage child learning in those settings. *Evaluation* involves parent efficacy appraisals of whether his or her child benefited from the everyday learning opportunities and the extent to which his or her efforts to support child learning were successful.

Planning. Parents and other primary caregivers are especially good at knowing and recognizing their children's likes and dislikes, preferred and nonpreferred activities, and their strengths and weaknesses. The intentional use of this information for deciding the particular everyday activities that provide the best contexts for interest-based learning is fundamentally important as part of providing children everyday natural learning opportunities. Findings from a research synthesis of interest-based child learning found that parents' identification of their children's likes and preferences, and the use of this information for providing child learning opportunities, showed a very strong relationship to child benefits (Raab & Dunst, in press).

Implementation. Efforts to have parents increase their children's participation in everyday activities and use interactional styles that are known to strengthen and promote child competence have proven quite easy. In one study, for example, it took less than two weeks for parents to increase the number, frequency, and quality of everyday child learning opportunities (Dunst, Bruder, Trivette, Hamby et al., 2001). It was similarly easy to encourage parents' use of simple, but highly effective interactional styles for supporting child learning in the activities.

What parents do to support and encourage child learning as part of children's participation in everyday activities is important for a number of reasons. Research indicates that parent responsiveness to and support of child behavior in the context of everyday activity settings is a potent strategy for supporting and strengthening child competence expression and for promoting child acquisition of new abilities (see e.g., Kassow & Dunst, 2004, 2005; Shonkoff & Phillips, 2000). Responsive teaching, incidental teaching, and other *in vivo* instructional techniques and strategies emphasizing responsiveness to and support of child competence ex-

pression are especially effective when children are engaged in interactions with people and objects (see e.g., Dunst, Wortman Lowe, & Bartholomew, 1990).

Evaluation. The extent to which parents and other primary caregivers continue to provide their children everyday learning opportunities and support their children's competence expression in the activities is dependent upon the self-efficacy evaluations of their parent-mediated efforts. Two types of self-efficacy belief appraisals (Bandura, 1997) are likely to influence parents' attributions and actions: (1) the extent to which the learning opportunities afforded a child have expected or desired consequences and (2) the extent to which the parents' decisions and actions strengthen their confidence and competence in their parenting capabilities. Engaging parents in discussion, reflection, and evaluation of their decisions and actions can contribute to a strengthened sense of confidence and competence. The importance of doing so is based on research showing that parents' self-efficacy beliefs are important mediators of both the experiences afforded children and the benefits and consequences of the experiences for their children (e.g., Coleman & Karraker, 2003; Coleman et al., 2002; Teti & Gelfand, 1991).

Outcomes and Benefits

CMP is judged successful to the extent that children have increased opportunities to participate in socially and culturally meaningful activity, and both parent and child confidence and competence are strengthened as a consequence of parent-mediated child learning. Findings from a number of studies indicate that practitioner use of family-centered helpgiving practices that actively encourage and support parent-mediated child learning is an important contributor to attainment of the desired CMP outcomes and benefits (Dunst, Trivette, & Hamby, 2006).

Participation refers to the ways in which a child takes part in everyday activity--beginning it, ending it, joining in interactions, giving and asking for assistance. etc., promoting involvement in the social and cultural groups to which he or she belongs and experiences and opportunities that are valued by the family (Shweder et al., 1998). Children's increased participation in everyday activity making up the fabric of family and community life is a major goal of CMP. This is accomplished with explicit attention to opportunities promoting child behavior that is conventional and both socially and culturally valued. That is, child participation is increased in ways that provide opportunities to learn, practice, and perfect abilities that permit a child to 'fit' into his or her social and cultural groups and settings.

Several different aspects of *child and parent com*petence constitute desired outcomes of CMP. *Child* competence refers to the behavior children use to initiate and sustain interactions with and feedback from people and objects. These child-initiated, self-directed behaviors are best described as interactive competencies (Dunst, Holbert, & Wilson, 1990; Dunst & McWilliam, 1988). An interactive competency is a child behavior that is used to produce environmental consequences demonstrating a shift in balance of power in interactions with people (and objects) toward the developing child. A shift in balance-of-power is manifested in situations when a child initiates more interactions than do their parents or other primary caregivers and they attempt to "control" the nature or content of interactions with people and objects using increasingly more complex behavioral competencies (e.g., Bronfenbrenner, 1979). Dunst (1979), for example, found that both children with and without disabilities showed this type of shift in balanceof-power between 8 and 14 months of age developmentally in interactions with their mothers.

Parent competence is measured in terms of child interest identification, the selection of everyday activities that are contexts of interest expression, parenting efforts to increase child participation in everyday activities, and parents' roles in supporting child learning in these activities. Special attention is placed on self-efficacy beliefs that are known to be mediators of all of the above kinds of parenting behavior. These self-efficacy beliefs are measured in terms of parents' judgments about their abilities to plan and provide their children interest-based everyday learning opportunities that lead to desired outcomes (Bandura, 1997).

CONCLUSION

This CASEinPoint included descriptions and explanations of a Contextually Mediated Practices approach to early childhood intervention. Both the conceptual and operational foundations of CMP were the focus of the paper as were the research foundations of this approach to early childhood intervention. CMP is based on converging bodies of theoretical and empirical evidence about those features of interest-based, everyday child learning opportunities that are most likely to have both development-instigating and development-enhancing characteristics and consequences.

Corroborating bodies of research findings show that different aspects of CMP are related to positive child and parent functioning. Taken together, this research provides a considerable amount of support for parent-mediated everyday child learning if the *goal of early childhood intervention is increased child and parent competence and confidence and child and parent recognition of their capabilities* (Dunst, in press). This point cannot be emphasized enough. Many early childhood intervention practices place primary emphasis on adult-elicited child behavior as typically described on IFSPs or IEPs. These kinds of practices are more likely to teach a child that he or she is to produce behavior in forms and amounts pre-

scribed by others (e.g., "Child will repeat five gestures four times in a row on four consecutive days"). These kinds of goals are entirely inconsistent with CMP where the focus of early childhood intervention is increased child competence and confidence manifested in the form of child-initiated and child-directed learning.

A final point needs to be explicitly made about parent-mediated everyday child learning opportunities. The goal of CMP is not to have parents do therapy or intervention in activity settings. Rather, the goal is to have parents increase child participation in activity settings having features and characteristics most likely to optimize child production of context-specific, culturally meaningful behavior. A challenge in using CMP is shifting emphasis away from therapy or intervention as a primary or only means of affecting child change to using everyday opportunities as sources of experiences (early intervention) producing desired benefits and effects (see especially Duchan, 1997; Dunst, Bruder, Trivette, Hamby et al., 2001; Kellegrew, 1998; Law et al., 1998; Trivette, Dunst, & Deal, 1997). As noted throughout this CASEinPoint, the basis for using everyday child learning opportunities as an approach to early childhood intervention is an emerging body of evidence about those practice characteristics that matter most in terms of optimally influencing child learning and development (see e.g., Raab, 2005a, for a compilation of outcome studies). The companion to this background paper includes descriptions of how CMP is implemented with children and their parents (Dunst, 2006).

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