CENTRE FOR COMMUNITY CHILD HEALTH

Working Paper

**EARLY CHILDHOOD INTERVENTION:
CORE KNOWLEDGE AND SKILLS**

CCCH Working Paper 3

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EVOLUTION OF EARLY CHILDHOOD INTERVENTION PRACTICE

In its relatively short history, the field of early childhood intervention has evolved
rapidly, and a number of well-documented trends have become evident. In response
to social change and service developments, the field has continued to evolve and a
number of emerging trends can also be identified. Moore (2006a) has outlined the
following well-established and emerging trends:

Well-established trends

- ***From professionally-directed to family-centred practice*** (Blue-Banning,
  Summers, Frankland, Nelson and Beegle, 2004; Dunst, 1997; Moore, 1996;
  Moore and Larkin, 2006; Rosenbaum, King, Law, King and Evans, 1998; Turnbull,
  Turbiville and Turnbull, 2000). As in many other forms of human service, early
  intervention has seen a shift away from a service delivery model in which the
  professionals controlled the process of diagnosis and treatment to one which
  seeks to base service on needs and priorities identified by parents, building upon
  existing family competencies and mobilising local resources. This family-centred
  approach is based on a partnership between parents and professionals with the
  parents making the final decision about priorities and intervention strategies, and
  represents a profound shift in the *manner* in which early intervention services are
  delivered.

- ***From a child-focused to a family-focused approach*** (Bernheimer, Gallimore
  and Weisner, 1990; Bernheimer and Weisner, 2007; Buysse and Wesley, 1993;
  Moore, 1996; Stayton and Bruder, 1999). The initial form in which early
  intervention was conceived was child-focussed: services primarily took the form of
  specialist interventionists worked directly with the child. Research indicated that

this approach did not produce lasting change and experience suggested the parents' needs for support and information were being neglected. Programs were developed to address these gaps, becoming more parent-focussed. Subsequently, the needs of the family as a whole came to be considered as well. This included recognition of the needs of other family members, such as siblings and grandparents, as well as consideration of the overall circumstances of the family (including employment, housing, transport, and health), and of the family's 'ecocultural niche' (Bernheimer, Gallimore and Weisner, 1990; Bernheimer and Weisner, 2007; Gallimore, Bernheimer and Weisner, 1999; Gallimore, Weisner, Bernheimer, Guthrie and Nihira, 1993).

- ***From an isolationist model of family functioning to a systemic ecological model*** (Bronfenbrenner, 1979, 1995; Bronfenbrenner and Morris, 1998; Erickson and Kurz-Riemer, 1999). The implicit assumption underlying early efforts to support families of young children with disabilities was that families functioned more or less independently of the wider social context. There is now a much greater understanding of the way that family functioning is dependent upon the immediate community and wider social environments, and of the consequent need to provide services that take these wider factors into account (Guralnick, 2005). This included a greater awareness of the importance of social support and the key role played by families' personal support networks (Cooper, Arber, Fee and Ginn, 1999; Crnic and Stormshak, 1997).

- ***From simple linear causal models to complex transactional models*** (Moore, 1996). This progressive broadening of early intervention goals went hand in hand with a reconceptualisation of how early childhood intervention achieved its effects. The early programs were based on an underlying assumption that direct child-focussed therapeutic and educational programs were all that was needed to create long-lasting changes in children. The failure of such programs to achieve permanent change soon led to the development of theories (Sameroff and Chandler, 1975; Sameroff and Fiese, 2000) and practices (Bromwich, 1978, 1997) based on a transactional model of change and development in which development was seen as the result of a dynamic reciprocal interaction between the child's biological and intrapersonal characteristics on the one hand, and family and community factors on the other.

- ***From segregated centre-based services to inclusive community-based services*** (Dunst, 2001; Grisham-Brown, Hemmeter and Pretti-Frontczak, 2005; Guralnick, 2001; McNaughton, 2006; Odom, 2002; Pilkington and Malinowski, 2002; Stayton and Bruder, 1999). There has been a growing recognition, backed by research evidence, of the importance for children with disabilities of being able to mix with children without disabilities in mainstream early childhood and community settings. Inclusion in mainstream services is now recognised both as a right and as a major intervention strategy. The location in which early childhood intervention services are provided has diversified accordingly, and increasingly occurs in settings with children without disabilities. The early childhood interventionist's role has broadened to include provision of support to mainstream settings (Buysse and Wesley, 2005; Hanft, Rush and Shelden, 2004).

- ***From a deficit model of disability to a social construction model*** (Odom, Horner, Snell and Blacher, 2007; Turnbull and Turnbull, 2003; World Health Organisation, 2001, 2002). There has been what amounts to a paradigm shift in the way that we conceptualise disability. Disability used to be viewed from an individual-deficit perspective that considered individuals with disabilities and their families to be responsible for fitting into various environments by developing skills and learning appropriate behaviours so as to earn the right to live in the general community (Turnbull and Turnbull, 2003). Replacing this is a view that people's impairments become disabilities as a result of the interaction between the individual and the physical and social environments in which they live (Turnbull and Turnbull, 2003; World Health Organisation, 2001, 2002). In this view, people with disabilities do not need to wait until they have developed certain skills and behaviours in order to participate inclusively in relationships and community settings, but can do so from the outset as long as they have the appropriate level of supports to enhance the way that they develop, learn, and live (Turnbull and Turnbull, 2003).

- ***From multidisciplinary to interdisciplinary teamwork*** (Briggs, 1997; McWilliam, 2000; Rapport, McWilliam, and Smith, 2004). When early childhood intervention programs were first established, services to children were often delivered in a multidisciplinary fashion, with different specialists working with the child independently of one another. The conflicts this sometimes created for families prompted a shift to interdisciplinary practice, in which specialists coordinated their efforts to a much greater extent but still continued to be directly involved with the child and family.

- ***From norm-referenced assessment methods to authentic and functional assessment approaches*** (Bagnato, 2007; Meisels and Atkins-Burnett, 2000; Schneider, Gurucharri, Gutierrez and Gaebler-Spira, 2001). Norm-referenced (or developmental) assessment is based on the notion that interventions should be directed at helping children attain sequential developmental positions and move 'normally' through them. This has been largely replaced by authentic and functional assessment approaches, which are seek to understand the behaviour of young children in natural settings (Bagnato, 2007) and are based on the notion that interventions should be directed to helping children complete activities of daily living at home and in the community (Schneider, Gurucharri, Gutierrez and Gaebler-Spira, 2001). This means the fusion of assessment and intervention (Meisels and Atkins-Burnett, 2000). Formal assessment is recognised as only the first step in the process of learning about the child and family - through intervention (applying the ideas or hypotheses generated by the initial assessment), more can be learned that can serve the dual purpose of refining the assessment and enhancing the intervention.

Although not all of these practices are universally applied, they are well accepted as the basis on which services should be delivered. There are also a number of emerging trends or new practices which are likely to become accepted as best practice in due course.

Emerging trends

- ***From a clinical approach to a natural learning environments approach***
  (Bruder and Dunst, 1999; Childress, 2004; Dunst and Bruder, 2002; Hanft and
  Pilkington, 2000; Noonan and McCormick, 2005). The traditional clinical approach
  (in which children were 'treated' by specialists in clinical settings) limits the
  opportunities the child has to practise the skills they need to develop and cannot
  guarantee that the child will transfer those skills to everyday settings. Children
  learn best when provided with multiple opportunities to practice developmentally
  appropriate and functional skills in real life settings. The key to promoting the
  acquisition of such skills by children with developmental disabilities lies in what
  happens to children in the times and settings when the specialist ECI staff are *not*
  there, ie. in their family, community and early childhood service settings.
  Accordingly, the clinical service model is being replaced by a natural learning
  environments approach in which specialists seek to identify and utilise natural
  learning opportunities that occur in the course of children's everyday home and
  community routines. Embedding supports pervasively throughout all
  environments enables people with disabilities and their families to live life very
  differently (Turnbull and Turnbull, 2003).

- ***From a direct service delivery model to indirect and consultative forms of
  service delivery*** (Hanft, Rush and and Shelden, 2004; Stayton and Bruder,
  1999). The primary role of early interventionists originally centered around
  provision of direct services to young children with disabilities and their families.
  The trend toward more inclusive, coordinated, comprehensive, family-centered
  services within community settings has required a reconceptualisation of the early
  interventionist from direct service provider to indirect service provider, with a
  flexibility to assume multiple roles. These include skills in consultation (Buysse
  and Wesley, 2005) and coaching (Hanft, Rush and Shelden, 2004).

- ***From fragmented services to seamless service integration*** (Guralnick, 2008;
  Harbin, McWilliam and Gallagher, 2000; Pilkington and Malinowski, 2002; Rosin
  and Hecht, 1997). It is becoming increasingly apparent that early childhood
  intervention services cannot meet all of the needs of the families they serve,
  particularly families with complex needs. To ensure that the needs of these
  families are met, early childhood intervention services need to become part of
  wider networks of services that work together to provide holistic integrated
  services to families (CCCH, 2006; Kaufmann and Hepburn, 2007; Perry,
  Kaufmann and Knitzer, 2007).

- ***From interdisciplinary to transdisciplinary teamwork and key worker models***
  (Drennan, Wagner and Rosenbaum, 2005; Harbin, McWilliam and Gallagher,
  2000; McWilliam, 2000; Martin, 2004; Moore, 2004; Pilkington and Malinowski,
  2002; Rapport, McWilliam and Smith, 2004; Stayton and Bruder, 1999; Woodruff
  and Shelton, 2006). In transdisciplinary teamwork, several professionals provide
  an integrated service to the child and family, with one professional acting as the
  key worker (Liabo, Newman, Stephens and Lowe, 2001; Mukherjee, Beresford
  and Sloper, 1999). The rationale for adopting this approach is two-fold. First,
  there is good evidence that parents prefer and do better with a single case worker
  (Bruder, 2000; Sloper, 1999; Sloper, Greco, Beecham and Webb, 2006);

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according to Bruder (2000), transdisciplinary teamwork is 'absolutely necessary for effective intervention'. Second, because of increases in parent numbers, services are no longer able to provide full interdisciplinary services to all eligible families.

The quality of relationships within teams contributes to the ability of team members to work supportively with parents and families (Pilkington and Malinowski, 2002). Ways of building supportive collegiate relationships have been identified by Brunnelli and Schneider (2004), Drennan, Wagner and Rosenbaum (2005), and Rapport, McWilliam and Smith (2004).

- ***From a service-based to an outcomes-based approach*** (Bailey, McWilliam, Darkes, Hebbeler, Simeonsson, Spiker and Wagner, 1998; Dunst and Bruder, 2002; Friedman, 2005; Harbin, Rous and McLean, 2005; Moore, 2007a). Like many forms of human service delivery, the early childhood intervention sector has tended to view its established forms of service as important in their own right, rather than as means to an end (that is, achieving positive changes in child and family). Increasingly, there is a recognition of the importance of basing services on agreed outcomes (starting with the end in mind) and selecting the form of service delivery best able to achieve these outcomes (Moore, 2006b, 2007a). For example, Indiana's First Steps Early Intervention System has adopted a statewide evaluation system that focuses on the outcomes for children, families and communities, not on services or procedures (Conn-Power and Dixon, 2003). Data collection procedures are embedded into ongoing service routines and are locally implemented by service providers (and therefore do not require independent or outside investigators).

- ***From a tradition-based approach to an evidence-based approach to service delivery*** (Buysse and Wesley, 2006; Dunst, Trivette and Cutspec, 2002; Guralnick, 2008; Hemmeter, Joseph, Smith and Sandall, 2001; Law, 2000; Moore, 2005a; Odom and Wolery, 2003; Noyes-Grosser, Holland, Lyons, Holland, Romanczyk and Gillis, 2005). As in other human service sectors, the early childhood intervention field has tended to persevere with established forms of service delivery that have good face validity but have not necessarily been proven to be effective. There is now enough accumulated evidence to suggest which forms of service delivery are most effective (Odom and Wolery, 2003), and there is an increasing recognition that these are to be preferred). Law (2000) provides guidelines for direct service providers on how to do this. The Research and Training Center on Early Childhood Development (www.researchtopractice.info) has prepared a number of practice-based research syntheses using a methodological approach that examines the characteristics and consequences of practices, how practice and outcome variables are related, and how this relationship informs what parents and practitioners can do to implement practices based on available research evidence (Dunst, Trivette and Cutspec, 2002; Dunst, 2007).

- ***From a deficit-based to a strength-based approach*** (Pilkington and Malinowski, 2002; Saleebey, 2006; Turnbull, Turbiville and Turnbull, 2000). Early intervention has followed the natural evolutionary path, evident in other areas of human services, from an initial focus on treating deficits, succeeded by an

emphasis on remediating, and culminating in an increasing emphasis on promoting strengths. In early intervention, this has resulted in a general emphasis on empowerment and efforts to acknowledge and build on the existing strengths both of children (Zeitlin and Williamson, 1994) and of families (Scott and O'Neill, 2003). Training programs, such as those developed at St. Luke's in Bendigo (McCashen, 2004) are now available.

- ***From a focus on parental grief and adaptation to a recognition of the positive aspects of having a child with a developmental disability*** (Blacher and Hatton, 2007; Gallagher, Fialka, Rhodes and Arceneaux, 2002; Hastings and Taunt, 2002). Early efforts to help parents drew on models of grief developed in the context of the death of a loved one. These tended to empathise negative reactions such as sadness, denial and anger, or the potentially traumatic impact of having a child with a disability (Bruce and Schultz, 2001). This approach stressed the importance of parents ultimately 'accepting' the disability. More recent thinking has highlighted the fact that some families go beyond mere acceptance and transcend the challenges, ending up stronger than before (Bayat, 2007; Flaherty and Glidden, 2000; King, Zwaigenbaum, King, Baxter, Rosenbaum and Bates, 2006; Linley and Joseph, 2005). There is increasing recognition of the importance of asking more positive questions about the perceptions and experiences of families of children with developmental disabilities (Gallagher, Fialka, Rhodes and Arceneaux, 2002; Hastings and Taunt, 2002).

- ***From a professional skill-based approach to a relationship-based approach*** (Edelman, 2004; Gowen and Nebrig, 2001; Heffron, 2000; Heffron, Ivins and Weston, 2005; Kalmanson and Seligman, 2006; Moore, 2006c, 2007b; Pawl and Milburn, 2006; Pilkington and Malinowski, 2002; Weston, Ivins, Heffron and Sweet, 1997). Important as specialist knowledge and skills are, there is a growing recognition of the equal importance of relationship skills in working effectively with families (as well as with other professionals) (Davis, Day and Bidmead, 2002; Dunst and Trivette, 1996; Hornby, 1994; Moore, 2006b; Moore and Moore, 2003; Pawl and St. John, 1998). However, a relationship-based approach broadens this beyond the relationship between service providers and parents. According to Heffron (2000), 'relationship-based preventive intervention is a way of delivering a variety of services to infants, toddlers, and families that includes a focus on the importance of parent-child interaction, knowledge of how parallel process or how the staff-family relationship influences the family-child relationships, and the deliberate use of the intervenor's self awareness in working with infants and families where relationships are at risk' (p. 16). There are now some good examples of how early childhood intervention services can adopt a relationship-based approach (Gilkerson and Kopel, 2005; Gilkerson and Ritzler, 2005).

- ***From a focus on differences between children with and without disabilities to a recognition of the commonalities between them*** (Moore, 2001, 2004). Young children with developmental disabilities share the same core needs as all other children, needs that are easily lost sight of when parents or specialists focus unduly on their special or additional needs. There is also evidence that there are many commonalities between the practices that have been found to be most effective in working with children who have developmental disabilities and those recommended for children who have no developmental problems (Moore, 2001).

The children themselves, and the underlying principles for working with them, are more the same than different. This is true also of families of children with and without developmental disabilities. Families of children with developmental disabilities have universal needs that they share with all families, plus some additional needs unique to their particular subset of families. This is in contrast to thinking of them as a different classes or types of families altogether, all of whose needs should be met through different specialist systems of services (Moore, 2004).

- ***From an authoritative expert stance to reflective practice*** (Gilkerson, 2004; Schön, 1987; Shahmoon-Shanok, 2006; Wesley and Buysse, 2001; Weston, 2005). Reflective practice refers to the ongoing process whereby practitioners critically examine their past and current practices in order to ensure that they are delivering services as they intended and achieving desired outcomes. This is now increasingly recognised as an essential feature of best professional practice in an ever-changing world. To support ongoing reflective practice, reflective supervision is needed (Bertacchi and Norman-Murch, 1999; Gilkerson, 2004; Gilkerson and Ritzler, 2005; Norman-Murch and Ward, 1999; Pawl, 1995).

- ***From a deficit-based approach to eligibility assessment to a response-to-intervention approach*** (Coleman, Buysse and Neitzel, 2006; Fuchs and Fuchs, 2005; NASDSE, 2005). The traditional approach to determining the eligibility of a child for special education is to compare their scores on intelligence tests with their academic performance. However, this method does not discriminate between those children who truly have a learning disability and those who had just fallen behind because they have not received appropriate experiences or instruction. In contrast, the response to intervention approach emphasises pre-referral prevention and intervention based on recognition of early warning sings that the child is not learning in the expected manner. In this approach, there is limited reliance on formal diagnosis and labeling. Instead, there is a systematic approach to responding to early learning difficulties that includes assessing the overall quality of early learning experiences for all children and providing a series of progressively more intensive research-based interventions. Children are not deemed to have learning disabilities until it can be demonstrated that they do not respond to such interventions.

IMPLICATIONS FOR EARLY CHILDHOOD INTERVENTION SERVICES

- ***ECI services need to shift from a service-based approach to an outcomes-based approach.*** This will involve gaining agreement with parents, other services, and the wider community as to what outcomes we should be working towards. Outcomes for the ECI field in Victoria have been developed by Early Childhood Intervention Australia (Victorian Chapter)(2005).

- ***ECI services need to develop skills in working in partnership with other specialist and mainstream agencies*** (Lowenthal, 1996; Rosin and Hecht, 1997). Partnerships with other specialist services are necessary to ensure that families receive all the supports they need in an integrated fashion. Partnerships with mainstream services are needed to ensure that they are able to meet the needs of children with developmental disabilities in an inclusive fashion.

- ***ECI services need to explore ways in which some of our services can be embedded in mainstream settings.*** Among other things, this means applying our knowledge and skills to children who are not (yet) eligible for early childhood intervention services but who are experiencing some developmental difficulties.

- ***ECI services need to develop our skills in exploiting natural learning opportunities in home and community settings.*** This is one of the most powerful tools we have at our disposal, and we need to build our experience and skills in using this approach.

- ***ECI services need to develop our consultancy skills for work with mainstream services.*** This involves training in the consultation and coaching skills necessary to ensure that they are able to share their expertise with universal service providers effectively (Buysse and Wesley, 2004; Hanft, Rush and Shelden, 2004). More specifically, it includes how to help non-specialist service providers apply natural learning opportunities approaches in mainstream and community settings (Gettinger, Stoiber, Goetz and Caspe, 1999; Johnson, Zorn, Tam, Lamontagne and Johnson, 2003; Knapp-Philo, Corso, Brekken and Bair Heal, 2004).

- ***ECI services need to learn how to work in transdisciplinary teams*** (Briggs, 1997; Straka and Bricker, 1996; Widerstrom and Abelman, 1996; Woodruff and Shelton, 2006). This is both a necessary economy required of us by social and economic changes, and a desirable streamlining of support to families. Learning to work in a transdisciplinary way is a developmental accomplishment for early childhood interventionists that takes support, training and time.

- ***ECI services need to develop our helping and 'people' skills.*** This requires a combination of training (Davis, Day and Bidmead, 2002; Moore and Moore, 2003) and ongoing supervision.

- ***ECI services need to continue to build our family partnership skills and family-centred practices.*** Again, this involves training (Bailey, McWilliam, Winton and Simeonsson, 1992; Bruder, 2000; McBride and Brotherson, 1997; Stayton and Bruder, 1999) as well as ongoing support and supervision.

- ***ECI services need to develop our understanding of and skills in relationship-based practice.*** To achieve this, we need to enlist the support of infant mental health specialists (Costa, 2006; Foley and Hochman, 2006; Gilkerson and Ritzler, 2005; Heffron, Ivins and Weston, 2005; Pawl and milburn, 2006).

- ***ECI services need to become truly reflective practitioners.*** The most effective practitioners are those who constantly reflect upon the work they do, and whether it is achieving the goals they and those they support have in mind. Given the ongoing rate of social change, it is essential that we establish habits of life-long learning (Shahmoon-Shanok, 2006).

CORE KNOWLEDGE AND SKILLS

What are the core knowledge and skills needed by early childhood intervention professionals? The following list of knowledge and skills draws upon three sources:

1. The analysis of established and emerging trends in early childhood intervention service delivery provided by Moore (2006a). As shown above, this identifies seven established trends and eleven emerging trends.

2. The national study of the training needs of professional who work with young children and their families conducted by the Centre for Community Child Health. As shown in the final report (Centre for Community Child Health, 2003) and summarised by Moore (2005b), this study identified a core curriculum comprising nine areas of knowledge and seven sets of skills.

    The *nine knowledge areas* proposed are as follows:
    -   Understanding the core principles of child development and the key developmental tasks faced by young children and their implications for practice
    -   Understanding the cumulative effects of multiple risk and protective factors and the developmental implications of the balance between them
    -   Understanding what conditions and experiences are known to have adverse effects on prenatal and early child development
    -   Understanding what conditions and experiences are known to have positive effects on prenatal and early child development
    -   Understanding the factors that support or undermine the capacity of families to rear young children adequately
    -   Understanding the features of the family's immediate environment that are important for family functioning and young children's development and well-being
    -   Understanding what features and qualities of communities help or hinder families in their capacity to raise young children adequately
    -   Recognising the core needs that all children and families have in common, and how to provide inclusive child and family services
    -   Understanding the particular backgrounds, experiences and needs of children and families in exceptional circumstances or with additional needs

    In addition to the above knowledge areas, it is proposed that the core curriculum for those working with young children and families include the following *seven skill areas*:
    -   Understanding the features of effective evidence-based service delivery and being able to deliver such services
    -   Recognising the importance of coordinated service delivery to families and possessing the skills of interdisciplinary teamwork and interagency collaboration

- Possessing the skills to work effectively with infants and toddlers, and to help them master the key developmental tasks they face

- Knowing how to identify emerging child needs early, and how to address them

- Knowing how to manage children's health needs, eating behaviours, and exercise needs appropriately

- Knowing how to provide environments and relationships that are safe for young children

- Possessing the skills to work effectively with parents and families

3. The analysis of the key features of effective help-giving conducted by Dunst and Trivette (1996). On the basis of a number of studies on the characteristics and effects of help-giving behaviours, they concluded that there are three elements of effective help-giving: technical knowledge and skills, help-giver behaviours and attributions, and participatory involvement.

- *Technical knowledge and skills.* This refers to the help-giver's specialist knowledge and skills. High quality technical knowledge and skills result in the implementation of appropriate educational, therapeutic and medical interventions. Help which is technically of a high quality but which does not incorporate the other two elements can have positive outcomes in one area (eg. in the child's health) but negative outcomes in others (eg. parental resentment and disempowerment as a result of the manner in which the services are delivered)

- *Help-giver behaviours and attributions.* Help-giver behaviours which positively influence psychological well-being include good listening, empathy and warmth. Help-giver attributions that have positive outcomes include beliefs in the person or family's competences and capabilities. Positive help-giver behaviours and attributions result in (a) greater parental satisfaction with and acceptance of helping, and (b) greater psychological and emotional well-being. Help-giving behaviours and attributions are a necessary but not sufficient condition for strengthening family competencies and developing new capabilities. To achieve that, the third element of effective help-giving is necessary.

- *Participatory involvement.* This entails the recipients of help being offered information about intervention options, sharing decision making, and being directly involved in acting on decisions. Effective participatory involvement results in (a) parents feeling more in control, and (b) strengthening of parental competencies. All three elements need to be present for help-giving to be truly effective. The second and third components provide value-added benefits.

All three elements need to be present for help-giving to be truly effective. According to Dunst and Trivette, the helpgiving and participatory involvement elements cannot be faked:

'Research indicates that help receivers are especially able to "see through" helpgivers who act as if they care but don't, and helpgivers that give the

impression that help receivers have meaningful choices and decisions when they do not.' (Dunst and Trivette, 1996, p. 337)

What evidence is there that these help-giving styles are associated with better outcomes? A number of studies have found that help-giving that incorporates the above features is associated with greater parental sense of control (Trivette, Dunst, Boyd and Hamby, 1995; Trivette, Dunst and Hamby, 1996b) as well as fostering perceived confidence and competence of family members (Washington and Schwartz, 1996). There is also evidence that family-centred programs models incorporating participatory helpgiving practices are more effective in empowering families (ie. in supporting and strengthening family competencies and problem solving abilities)(Trivette, Dunst and Hamby, 1996a, 1996b; Judge, 1997; King, King, Rosenbaum and Goffin, 1999; Thompson, Lobb, Elling, Herman, Jurkiewicz and Hulleza, 1997). Participatory practices have been shown to have value-added benefits beyond those attributable to relational helpgiving practices (Dunst and Trivette, 1996; Gutierrez, GlenMaye and DeLois, 1995).

The following list groups core knowledge and skills under the three elements of effective help-giving identified by Dunst and Trivette (1996). The second and third elements have been reworded to make more immediately apparent the nature of the skills involved.

Core knowledge and skills in early childhood intervention

Key elements of effective help-giving	Specific knowledge and skill areas
Technical knowledge and skills	• Knowledge of early childhood development • Skills in identifying and assessing young children with developmental disabilities • Skills in working with young children with developmental disabilities • Skills in working with families of young children with developmental disabilities • Knowledge and skills in use of evidence-based practices • Inclusion support skills • Skills in using natural learning opportunities • Skills in outcomes-based service delivery and evaluation
Attitudes and help-giving skills and practices	• Helping/counselling skills • Relationship-based practice skills • Cultural competency skills • Consultancy and coaching skills • Teamwork and collaboration skills • Staff and program management skills

Empowerment skills and practices	• Family-centred practice skills
	• Strength-based practices

Are any of these areas of knowledge and skills more important than any others? An indication of which skills might be most central to effective practice comes from a review of interventions addressing infant mental health problems (Barnes and Freude-Lagevardi, 2003; Barnes, 2003). This identified a number of necessary, but not sufficient, factors associated with enhanced infant mental health outcomes. Barnes (2003) divided these into primary (threshold) factors that function in an all-or-nothing manner and secondary factors (fine-tuning).

There were six primary factors:

- There was shared decision-making between parent and therapist / intervenor
- There was a positive relationship between the parent and the intervenor
- The intervention was presented in a non-stigmatising manner
- The service was delivered in a culturally sensitive / aware manner
- The intervention agency was flexible in choice of settings and hours of service
- Crisis help was provided prior to other intervention aims being addressed

The secondary factors included:

- Choice of theoretical model
- Choice of timing of intervention
- Choice of location to offer intervention — home, clinic, community location
- Choice of intervenor — professional, paraprofessional

Barnes explains the relationships between the primary and secondary factors thus:

> For example, if a reasonably satisfying therapeutic relationship cannot be established between intervenor and client, then the duration or intensity of an intervention program may be of little consequence. The same applies if the intervention model fails to match the parent's needs; if the parent is not involved in the decision-making or disagrees with any prescribed program goals / outcomes.

> If the intervention is experienced as stigmatizing / labelling or the family's cultural background is ignored then participation is unlikely to be maintained. If the parent is so overwhelmed by urgent and basic needs such as housing or food that this crisis prevents any focus/engagement with the content of the intervention then their capacity for engagement will be limited, even if they are assisted by strategies such as transport. It appears that these primary factors are predominantly factors of participant perceptions / beliefs about the importance or potential benefits of the intervention and if these are not addressed then it will be difficult to achieve change in behaviour.

If we view this list of primary factors from a training perspective, there are three that correspond to the core knowledge and skill areas identified earlier: helping / counselling skills, family-centred practice skills, and cultural competency skills. The

other three primary factors identified by Barnes have implications for service delivery rather than professional knowledge and skills, and therefore need to be reflected in service guidelines and practices rather than being the focus of training.

Are there any other areas of knowledge and skill can claim to be central to effective ECI practice? The Dunst and Trivette (1996) analysis of the elements of effective help-giving suggests that there is one more that should be added. Two of the three elements of effective help-giving – attitudes and help-giving skills and practices, and empowerment skills and practices – correspond to two of the three primary factors identified by Barnes. However, all three are necessary for help-giving to be effective, and the third element – technical knowledge and skills – also needs to be reflected in the final list of primary or threshold skills. It is not sufficient for ECI workers to be able to engage parents successfully and to be able to work in family-centred and culturally-sensitive ways if they do not also have the technical skills to be able to guide parents in promoting their children's development and functioning in everyday environments. The technical skill that seems most relevant here is the ability to work with young children with developmental disabilities.

This suggests that there are four sets of knowledge and skills that should be considered primary or threshold skills for ECI workers:

- helping / counselling skills,
- family-centred practice skills,
- cultural competency skills, and
- skills in working with young children with developmental disabilities

In addition, the key features of effective service delivery are

- Services are non-stigmatising
- Services are flexible in choice of settings and hours of service
- Families' holistic needs (including their needs for social support) are assessed and addressed

A course that incorporates many of the above features has been outlined by Shahmoon-Shanok, Henderson and Grellong (2006).

Implications

- All ECI staff should have training and ongoing supervision / support in the four primary or threshold skills.

- Where training packages in those skills do not exist, they should be sourced or adapted / developed and trialled. While two of the primary skills (helping / counselling skills, and family-centred practice skills) are well covered by existing training packages or course, the other two (cultural competency skills, and skills in working with young children with developmental disabilities) are not well served and appropriate courses and packages need to be developed.

- In addition to training in the primary skills, staff should have opportunities to receive training in the other core areas of knowledge and skills

- Where training packages in those skills do not exist, they should be sourced or adapted / developed and trialled. This applies to several of the knowledge / skill areas including knowledge of early childhood development. Knowledge and skills in use of evidence-based practices, inclusion support skills, skills in using natural learning opportunities, consultancy and coaching skills, and teamwork and collaboration skills.

- All ECI services should incorporate the key features of effective service delivery in their manuals / guidelines and actual practices

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