

**EARLY CHILDHOOD INTERVENTION AUSTRALIA**

8<sup>th</sup> National Conference  
Sydney, 19<sup>th</sup>-21<sup>st</sup> October 2008

*PAULINE MCGREGOR MEMORIAL ADDRESS*

**Beyond the evidence:  
Building universal early childhood services from the ground up**

**Tim Moore**

*Senior Research Fellow*

Centre for Community Child Health,  
Murdoch Children's Research Institute,  
Royal Children's Hospital, Melbourne

**Abstract**

In the inaugural Pauline McGregor Memorial Address given at ECIA's 7<sup>th</sup> National Conference in Adelaide in 2004, Christine Johnston spoke of 'robust hope', and how we might find a home for early childhood intervention in the changing early years landscape. This paper expands upon that theme, making the case that the future for early childhood intervention services lies in being part of a collective effort to build a universal early childhood service system from the ground up. The paper begins by outlining the strengths and weaknesses of both the current system of early childhood intervention services and the current system of mainstream early childhood and family support services. In both cases, the key question to be asked is whether these sets of services are able to achieve the outcomes we want in their present form or whether they need to be reconfigured. It is argued that the efficacy of both systems has been compromised by the dramatic social changes that have occurred over the past few decades, and that, despite their strengths and achievements, both need to change. The solutions to the problems faced by both early childhood intervention and mainstream early childhood services are essentially the same: what we need are more supportive and inclusive communities, more supportive and inclusive services, and an improved interface between communities and services, making them more responsive to the existing and emerging needs of children and families. The paper focuses on the need for more inclusive and supportive services, and outlines how a universal service system could address this need. It describes what such a system would look like, and what role specialist services such as early childhood intervention would play. Adapting to that role would present some challenges for early childhood intervention staff, and ways of meeting these are explored. Finally, it must be acknowledged that, in seeking to fashion a new integrated system, we have to go beyond the evidence – there are no randomised control trials to guide us in designing such a system, only the recognition of the need to change and the powerful logic behind the universal model presented here.

## **INTRODUCTION**

The first Pauline McGregor memorial address was given at the ECIA's 7<sup>th</sup> National Conference in Adelaide in 2006 by Christine Johnston. Chris spoke on the topic of 'Robust hope: Finding a home for early childhood intervention in the new early years landscape'. I will follow Chris's lead and use this opportunity to discuss the current status and future development of early childhood intervention services, building on that first address. In doing so, I will draw upon work that my Centre for Community Child Health (CCCH) colleagues and I have been doing in seeking to understand what is happening to children in our contemporary society and what we need to do to improve child and family outcomes. I will also be drawing on discussions with my Early Childhood Intervention Australia (ECIA) colleagues in Victoria about the status and future of early childhood intervention services.

The first half of the paper will address three questions, each related to the adage 'If it's not broken, don't fix it.' The first asks whether the early childhood intervention service system is 'broken' in any way and therefore needs 'fixing'; the second asks the same question of the general early childhood service system; and the third looks at the wider social context and asks if there are some aspects of contemporary society that are detrimental to the healthy development of young children and that we should be addressing.

In the second half of the paper, I will discuss aspects of a common solution to the problems identified, and explore the implications for early childhood intervention services.

## **IS IT BROKEN (#1)? THE CURRENT STATE OF ECIS**

In her address to the last National Conference, Chris Johnston (2006) noted that

'Throughout its history early childhood intervention has sought to balance two seemingly contradictory aims: to differentiate itself as a separate system to mainstream early childhood services and to work towards the inclusion of its client group (young children with disabilities and their families) within their local communities. The first has been necessary to ensure both a clear funding base for service delivery and recognition of the professional expertise needed for effective intervention.'

Increasingly, the first of these aims has been challenged by our changing views of people with disabilities, and by difficulties inherent in seeking to meet all the needs of children with developmental disabilities through a segregated specialist system of services.

The first challenge has come from what amounts to a paradigm shift in the way that we conceptualise disability (Odom, Horner, Snell and Blacher, 2007; Turnbull and Turnbull, 2003). 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).

There has also been a corresponding change in our thinking about educational provision for children with disabilities. As MacNaughton (2006) has noted, both special education and early childhood intervention have traditionally been based upon a 'special provisions' model which seeks to cater for those considered different from the norm in special or separate settings. This is in contrast to an 'equal opportunities' model that aims to give everyone, irrespective of differences, an equal opportunity to succeed within existing social structures and attitudes, and that focuses on removing the factors in policy and in practice that prevent children from participating in early childhood programs (MacNaughton, 2006). Increasingly, this latter view has come to be preferred.

This change in thinking has been matched by a growing realisation in early childhood intervention that, even if funding for early childhood intervention services were increased dramatically, the amount of direct intervention that could be provided to individual children would always occupy only be a small fraction of their daily lives. 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 early childhood intervention staff are *not* there, ie. in their family, community and early childhood service settings. This has profound implications for what the focus of early childhood intervention is and what outcomes are sought. Embedding supports pervasively throughout all environments enables people with disabilities and their families to live life very differently (Turnbull and Turnbull, 2003).

The second challenge to the strategy of differentiating early childhood intervention as a separate system to mainstream services comes from the growing realisation of how such a system makes it harder to achieve the outcomes we now consider to be desirable. One of the main problems is that early childhood intervention services can be difficult to get into and equally difficult to get out of. Getting into the early childhood intervention system can be problematic because of the eligibility requirements – some children have to wait until they get 'worse' relative to normally developing children before they meet the specified eligibility criteria, while for others there can be a protracted period in limbo while they search for a diagnosis that will make them eligible. Once in the system, it can be difficult to be accepted back into the mainstream service system: there is still a residual assumption among mainstream service providers that only specialists can meet the needs of children with developmental disabilities, and this assumption acts as a barrier to services becoming truly inclusive. As a result, the current

system has difficulty providing children and parents with opportunities to participate in typical community programs and activities, although this is now recognised as one of the central principles of effective early childhood intervention (Bailey, McWilliam, Buysse and Wesley, 1998; Guralnick, 2008).

Furthermore, as Chris Johnston (2006) has pointed out, the name change from *early intervention* to *early childhood intervention* has not brought the level of public awareness and recognition it was intended to achieve. Indeed, she suggests that the attempts to differentiate early childhood intervention from mainstream services may have resulted in early childhood intervention being marginalised within a landscape which seeks to assist all families deemed to be vulnerable. In this view the needs of families who have young children with disabilities may not be well-served by the traditional segregated system.

Another problem is that the current early childhood intervention system lacks many of the key features one would expect to find in fully mature service system (such as the school sector). As identified by Moore (2008a), the missing features include:

- A service framework / model that describes what children and families receive and what principles, practices and procedures are followed
- A professional development framework that covers pre-service skills, knowledge and values, induction procedures for new staff, and a in-service professional development program (incorporating supervision and mentoring)
- A career structure with sufficient depth to attract and retain capable staff
- Remuneration levels and staff working conditions to match other comparable service sectors
- A quality assurance system to monitor service delivery
- An outcomes-based funding framework
- An appropriate unit cost funding level to cover the provision of all of the above
- Sufficient overall funding to eliminate waiting lists and enable all identified children to have prompt access to early childhood intervention services.

These issues are not peculiar to early childhood intervention services or to Australia. Gallagher and Clifford (2000) report that early childhood programs in the US lack a comprehensive infrastructure or support system to stand behind the delivery of services to the child and family. They argue for the development of a support infrastructure capable of providing ongoing and effective assistance to those who work with young children, an argument that is equally valid in Australia.

Despite the weaknesses identified above, it should be acknowledged that the current early childhood intervention system has many strengths (Johnson, 2006; Moore, 2008a). These include:

- Its services are highly valued by parents

- It has a well-developed philosophy and practice model for working with parents (family-centred practice)
- It has some well-developed procedures (such as Family Service and Support Plans) for applying this philosophy
- There is a strong rationale for the provision of specialist support for children with developmental disabilities and their families early in life
- It has a body of experienced and well-trained practitioners
- It has collaborative skills and knowledge of transdisciplinary approaches to working with families and other professionals
- It has a sound understanding of child development and what constitutes atypical development
- It has a commitment to evidence-based practice and practice-based evidence
- It has begun work on an outcomes-based framework for service planning and delivery

Returning to the question of whether the early childhood intervention service system is 'broken' and needs fixing, the answer is yes and no – it has its strengths and weaknesses, as all systems tend to do. Given the shift in our thinking about the importance of everyday environments and of inclusion, the balance may have shifted to concluding that the system is indeed 'broken' and needs to be reconfigured.

Before we finally decide on this question, we need to consider what is happening in the early childhood field in general.

## **IS IT BROKEN (#2)? THE CURRENT STATE OF EARLY CHILDHOOD SERVICES**

As a result of the profound social and economic changes that have occurred in developed nations over the past 50 years, early childhood and family support services are experiencing difficulties meeting the needs of all children and families effectively (Moore, 2008b). These include the following:

- The service system is having difficulty providing support to all families who are eligible – many or most forms of service have waiting lists
- Services cannot meet all the needs of families that they do serve - no single service is capable of meeting the complex needs of many families, and these unmet needs may loom larger in the lives of parents than the needs of the child with a developmental or mental health problem.
- Families have difficulty finding out about and accessing the services they need – there is usually no single source of information about available services or a single entry point into the service system
- Services are often not well integrated with one another and are therefore unable to provide cohesive support to families

- Services have difficulty tailoring their services to meet the diverse needs of families
- Services have difficulty reaching and engaging marginalised families effectively
- Services are typically treatment-oriented rather than prevention- or promotion-focused, and therefore cannot respond promptly to emerging child and family needs
- The service system does not maintain continuous contact with families of young children during the early years
- Many families are isolated and lack supportive personal networks - extended family, friends or other families of young children
- The early childhood field is undervalued and underfunded, and has difficulty attracting and retaining staff
- Many people working with children and families have not had opportunities to learn about recent early childhood research findings
- Many people working with children and families have not been trained in ways of working with families

In addition to the challenges just listed, there are a number of systemic issues that create difficulties for child and family services.

- Government departments, research disciplines and service sectors tend to work in 'silos', despite there being strong arguments for greater service integration and a 'whole of government' approach to service delivery
- Responsibility for provision of services to young children and their families in Australia is spread across three levels of government - federal, state, and local - with different planning processes and funding priorities
- Most specialist intervention services are already underfunded, and it is looking increasingly unlikely that they can ever be fully funded in their present forms
- Governments spend a disproportionate amount on services for adults and the aged, in comparison to the very young, despite the greater developmental importance of the early years and the greater likelihood of young children living in poverty

It should be acknowledged that the difficulties that services are having in meeting all the needs of all families are not the fault of the services themselves. In many respects, Australia has an exemplary system of child and family support services, and it worked well when society was more homogeneous and the demands upon families were fewer. However, the social and economic changes have greatly altered the circumstances in which families are raising young children, and the traditional forms of service and support have not yet fully adapted to the new environment.

So, should the early childhood service system be regarded as 'broken' and in need of repair? Again, the answer is yes and no – like the early childhood intervention service system, it has its strengths and weaknesses. However, given the variable outcomes we are witnessing among our young people, we need to seriously consider the possibility

that, for a growing proportion of families, the early childhood system is no longer able to do the job it was designed for, and therefore needs to be reconfigured.

Before we finally decide on this matter, we need to consider what is happening in the wider society.

### **IS IT BROKEN (#3)? THE COMMON SOCIAL CONTEXT**

Is western society 'broken'? One reason why we might think so is that, despite increasing prosperity, outcomes for children and young adults have worsened or are unacceptably high (Perrin, Bloom and Gortmaker, 2007; Richardson and Prior, 2005; Stanley, Prior and Richardson, 2005; Zubrick, Silburn and Prior, 2005). This pattern is evident in all developed nations, including Australia:

'In Australia, decades of peace and economic prosperity had failed to translate into improvements in many measures of children's population health and well-being. In some areas, previous gains in health have slowed or have reversed, and there is a real possibility that the current generation of Australian children will not enjoy a better level of health and children than the preceding generation. In other areas, there is an increasing social divide with respect to the available opportunities to participate in the basic social, civic and economic activities of the nation.' (Zubrick, Silburn and Prior, 2005)

Worsening (or unacceptably high) developmental outcomes in young people are evident across all health and developmental indices, including mental health (eg. depression, suicide, drug dependence), physical health (eg. asthma, obesity, diabetes, heart disease), academic achievement (eg. literacy levels, retention rates, educational outcomes), and social adjustment (eg. employment, juvenile crime). All the poor developmental outcomes identified have associated social and financial costs that cumulatively represent a considerable drain on societal resources (Collins and Lapsley, 2008; Kids First Foundation, 2003; Perrin, Bloom and Gortmaker, 2007).

This phenomenon has been dubbed 'modernity's paradox':

'A puzzling paradox confronts observers of modern society. We are witnesses to a dramatic expansion of market-based economies whose capacity for wealth generation is awesome in comparison to both the distant and the recent past. At the same time, there is a growing perception of substantial threats to the health and well-being of today's children and youth in the very societies that benefit most from this abundance.' (Keating and Hertzman, 1999)

One manifestation of this paradox concerns people's well-being. Measures of social well-being used to increase in parallel with wealth as countries got richer during the course of economic development. But now, although rich countries have continued to get richer, measures of well-being have ceased to rise, and some have even fallen back a little. Since the 1970s or earlier, there has been no increase in average well-being despite rapid increases in wealth (Eckersley, 2005; Wilkinson, 2005).

How can 'modernity's paradox' be explained? We are still in the process of understanding exactly what has happened, but it appears that these worsening outcomes in development and well-being represent an *unintended* consequence of economic policies and practices that in other respects have been outstandingly successful. As Richardson and Prior (2005) have pointed out,

'... overall economic growth in Australia has gone from being quite modest in the 15 years following 1975 to being relatively rapid in the subsequent 15 years. Together these years of growth have produced impressive levels of general material prosperity, although the benefits of this prosperity have been very unevenly shared. And it has come at a cost that we do not yet fully understand.'

The degree of social change over the past 50 or so years has been profound and is unprecedented in its speed and scope. As a result of these changes, the service models and systems that were developed when the world was simpler are no longer adequate to meet the needs of all children and families in today's complex world.

The cumulative impact of these social changes are only just beginning to be understood. We are much better informed about the parallel changes that have occurred in the physical environment. One account of these changes describes them in the following terms:

A profound transformation of Earth's environment is now apparent, owing not to the great forces of nature or to extraterrestrial sources but to the numbers and activities of people - the phenomenon of global change. Begun centuries ago, this transformation has undergone a profound acceleration during the second half of the 20th century. During the last 100 years human population soared from little more than one to six billion and economic activity increased nearly 10-fold between 1950 and 2000. The world's population is more tightly connected than ever before via globalisation of economies and information flows. Half of Earth's land surface has been domesticated for direct human use. Most of the world's fisheries are fully or over-exploited. The composition of the atmosphere - greenhouse gases, reactive gases, aerosol particles - is now significantly different than it was a century ago. The Earth is now in the midst of its sixth great extinction event. The evidence that these changes are affecting the basic functioning of the Earth System, particularly the climate, grows stronger every year. The magnitude and rates of human-driven changes to the global environment are in many cases unprecedented for at least the last half-million years. (Steffen, Sanderson, Jäger, Tyson, Moore, Matson, Richardson, Oldfield, Schellnhuber, Turner and Wasson, 2004)

The same forces that have produced change in these dramatic climate changes over the past 50 years – population growth and industrial free-market economies (Speth, 2008; Steffen, Sanderson, Jäger, Tyson, Moore, Matson, Richardson, Oldfield, Schellnhuber, Turner and Wasson, 2004) – have resulted in major social and demographic changes that, over the same period, have dramatically altered the conditions under which families

are raising young children. These include changes in the natural environment, the built environment, and the social environment. Briefly, these are as follows:

### Changes in the natural environment

- **Global environmental change.** Ecological disruptions – in the form of land degradation, ozone depletion, and temperature increases – have potentially disastrous social and health outcomes, including food shortages, new and intensified disease patterns, rising seas, mass refugee problems, and cancers, blindness, and immune suppression from increased ultraviolet radiation (McMichael, 1993; Tait, 2008).

### Changes in the built environment

- **Environmental toxins.** There have been dramatic increases in our exposure to environmental toxins. When this occurs prenatally or early in life, it can have a devastating and lifelong effect on the developing architecture of the brain (National Scientific Council on the Developing Child, 2006).
- **Urban environments.** Urban environments have become more restricted, and this is having an impact on health in a number of ways (such as through lack of opportunities for physical activity)(Abeolata, 2004; Perrin, Bloom and Gortmaker, 2007).
- **Home living environments.** There have been significant changes in home living environments, resulting in increases in immune deficiency conditions, such as asthma, hay fever and eczema, and food allergies (Nakazawa, 2008; Stein, 2008).
- **Food production practices.** There have been major changes in food production practices, resulting in increases in the amount of salt, sugar and saturated fats in foods, as well as the addition of colourings, preservatives and other additives (McCann, Barrett, Cooper, Crumpler, Dalen, Grimshaw, Kitchin, Lok, Porteous, Prince, Sonuga-Barke, Warner & Stevenson, 2007; Rimland, 2007).
- **Food consumption patterns.** There have been changes in eating habits, including increases in energy intake, meals and snacks outside the home, and portion sizes (Perrin, Bloom and Gortmaker, 2007; Rimland, 2007).

### Changes in the social environment

- **Economic and social changes.** There have been major social and economic changes occurring that create challenges for families, services and governments (Moore, 2008b; Stanley, Richardson and Prior, 2005; Richardson and Prior, 2005). Internationally, these include the adoption of free market economic policies, concurrent rise in general prosperity, reduction in government control over market and in government responsibility for provision of public services, fall in birth rates,

increased movement of people between countries, and the globalisation of ideas and culture. In Australia, we have seen improvements in general prosperity, a drop in birth rate and decrease in proportion of children in society, changes in employment opportunities and conditions, changes in the cost of housing as a proportion of income, and increases in social mobility, with consequent weakening of the social infrastructure. These social and economic changes have had a significant impact on the conditions under which families are raising young children.

These social and economic changes have also had a significant impact on parents' confidence in their ability to raise their children well. Parents are more intensely concerned about their children's welfare, partly because they have fewer children and partly because of a heightened awareness of the many threats to their children's safety and well-being. Moreover, because families are smaller, people have less exposure to parenting while growing up and therefore have fewer models to draw upon when they tackle the task themselves. To complicate matters even further, there is less of a social consensus about the right way to bring up children, or even that there is a single right way. There has also been an increase in the number of parents whose own experiences of being parented were compromised, and who therefore have difficulty parenting their own children. All of these social changes have contributed to an undermining of confidence among parents in their ability to raise their children well, and to an increase in the number of families with complex needs. Overall, parenting young children has become a more complex and more stressful business for many families.

- ***Social inequities.*** Although overall prosperity has increased, so has the gap between the richest and the poorest, and, beyond a certain level of general wealth, this may be the factor that does the most damage (rather than absolute poverty) (Heymann, 2007; Kawachi and Kennedy, 2006; Prüss-Üstün and Corvalán, 2006; Wilkinson, 2005).
- ***Social values and priorities.*** The values that are characteristic of modern Western culture, such as materialism and individualism, are detrimental to health and well-being through their impacts on psychosocial factors such as personal control and social support (Eckersley, 2008; Hamilton and Denniss, 2005; James, 2008; Li, McMurray and Stanley, 2008).
- ***Social environments.*** There has been a partial erosion of traditional family and neighbourhood support networks, due to factors such as increased family mobility and the search for affordable housing (Richardson and Prior, 2005).
- ***Changes in stimulation levels.*** The rapid evolution in communication and other technologies combined with general increases in the pace of life have exposed children to greater levels of stimulation that appear to be having detrimental effects on their ability to sustain concentration and therefore learn effectively (Greenfield, 2008; Hallowell, 2006; Jackson, 2008).

- ***Nature and content of media.*** There have been dramatic changes in the forms of media to which children are exposed, as well as to the content, which can have a range of detrimental effects on children's physical health, development and well-being (Guernsey, 2007; Perrin, Bloom and Gortmaker, 2007).

The sheer scope and intensity of these recent changes in the natural, built and social environments is dramatic. As yet, we do not have a full understanding of how these changes interact with one another to produce these adverse effects, but there can be no doubt that cumulatively they are having a detrimental effect on many young people's well-being and development.

To return to the original question, is western society 'broken'? If by this question we are asking whether developed nations are facing a crisis, then the answer is yes: it appears that, as the unintended consequence of recent dramatic social and environmental changes, a significant number of children are experiencing worsening health and developmental outcomes, and many families are experiencing greater difficulties in parenting effectively. These changes parallel and arise from the same factors that produce global climate change and constitute a form of 'social climate change'.

~ ~ ~

We have now considered all three questions posed earlier: whether the early childhood intervention system is 'broken' in some way and therefore needed 'fixing', whether the same is true of the general early childhood service system, and whether there are some aspects of contemporary society that are detrimental to the healthy development of young children and that we should be addressing. We have seen that both the current system of early childhood intervention services and the current system of mainstream early childhood and family support services have strengths and as well as weaknesses, but are increasingly struggling to achieve the outcomes we want in their present form. It is argued that the efficacy of both systems has been compromised by the dramatic social changes that have occurred over the past few decades, and that, despite their strengths and achievements, both may need to change. If we broaden our perspective and consider what is happening in society as a whole, the argument for change becomes overwhelming: we need to take whatever action is needed to stop the apparent deterioration in the conditions under which many children are being raised, and to improve the conditions under which families are raising young children.

In the next section, we will explore how to begin meeting these challenges. I will argue that the solutions to the problems faced by families, as well as those faced by both early childhood intervention and mainstream early childhood services, are essentially the same: what we need are more supportive communities, better coordinated services, and improved forms of dialogue between communities and services (Moore, 2008b).

## **THE COMMON SOLUTION**

To begin to address the challenges faced by families of young children and the services that support them, we need to work on three fronts simultaneously: building more

supportive communities, creating a better coordinated service system, and developing improved forms of dialogue between communities and services to ensure that the service system is more responsive to the emerging needs of children and families (2008b).

- **More supportive communities.** As a result of the pervasive economic, social and demographic changes that have occurred over the past few decades, there has been a partial erosion of traditional family and neighbourhood support networks. This has left a greater proportion of parents of young children with relatively poor social support networks and therefore more vulnerable. The evidence regarding the importance of social support and social connectedness strongly suggests that one way in which we could address this problem is by providing families of young children with multiple opportunities to meet other families of young children.
- **Better co-ordinated services.** In the light of the difficulties that services have in meeting all the needs of all families effectively, the service system needs to become better integrated, so as to be able to meet the multiple needs of families in a more seamless way. We need to turn the system around so that it puts the customer first, tailoring our services to the needs and circumstances of families rather than the needs of professionals and bureaucracies.
- **Improved forms of dialogue between communities and services.** For the service system to become more responsive to the emerging needs of young children and families, we need better ways of communicating, more constant feedback. This needs to occur at all levels, involving service providers in their dealings with individual families, agencies with their client groups, and service systems with whole communities. For individual professionals, this means using a service philosophy based on family-centred and strength-based practices as well as needs-assessment procedures and tools that regard parent input as being as important as professional input. For service systems, it means developing skills in talking to communities of families – in other words, community-centred practice.

The remainder of the paper will focus on the second of these solutions – the need to build a better coordinated and more easily accessible system of services for young children and their families. However, it should not be forgotten that improving the conditions under which young children are being raised and achieving better outcomes for them ultimately depends upon taking action on all three fronts – no matter how much we improve the quality and integration of our service system, we will still need to take action to ensure that this system is responsive to the needs of families and communities, and that the communities themselves provide the conditions that families need to raise their children as they (and we) would wish.

A recent review of the evidence regarding ways of building a better coordinated and more easily accessible system of services for young children and their families (CCCH, 2006; Moore, 2008c) concluded that four forms of action were needed:

- A shift from treatment and targeted services to a universal prevention approach

- The development of an integrated tiered system of universal, targeted and specialist services
- A shift from a risk-based approach to targeting children and families in need to a response-based approach
- The development of better ways of engaging and retaining the most vulnerable families

The first of these ways in which the service system will need to shift is ***from targeted and treatment approaches to a universal prevention approach to service provision*** (CCCH, 2006; Moore, 2008c; Drielsma, 2005). In the existing system, targeted and treatment services are mostly located separately from universal services; there are referral 'bottlenecks' that result in delays in help being provided; and the communication between services tends to be one way. Services are having difficulties meeting the needs of all children and families effectively because they are too dependent upon scarce specialist services. Inevitably, there are delays in children with additional needs receiving the specialist support they need, and many children end up getting little or no help at all.

The answer is not simply to increase funding for targeted and treatment services (such as early childhood intervention services) in their current forms. First, given the range of services that would need additional funding (which includes health, mental health, disability, special education, family support, parenting, and child protection services), the cost would be prohibitive. Second, the evidence would suggest that the targeted approach is not the most efficient and effective way of meeting the needs of all children and families, or even those of the most vulnerable children and families for whom they are intended (CCCH, 2006).

The existing service system of universal, targeted and treatment services needs to be reconfigured as ***an integrated and tiered system of secondary and tertiary services, built upon a strong base of universal and primary services*** (CCCH, 2006; Gallagher, Clifford and Maxwell, 2004). Secondary and tertiary services are similar to targeted and treatment services in that they provide direct services to children and families with problems and conditions that are either mild or moderate (secondary services) or chronic, complex and severe (tertiary services). The three service tiers not only serve children and families with different levels of need, but also perform different functions. In the context of mental health services, Kaufman and Hepburn (2007) describe these different functions in the following terms:

- *Promotion and universal services and supports.* Promotion activities are directed at all children and their families and include approaches aimed at improving parenting knowledge and skills, child development, and social-emotional health. The majority of children and families will require only these forms of universal intervention.
- *Prevention and indicated services and supports.* Preventive measures are aimed at specific populations who are considered to be at risk because of biological or environmental factors. Preventive services are available before there are

diagnosable symptoms. These interventions can be integrated into environments that serving children and families at risk. About 10 to 15% of the population might need these services.

- *Intervention and targeted services and supports.* Intervention services and supports for children who have a significant delay or disability in psychosocial development essential to help them achieve their full potential and improve the quality of their relationships. Only 5 to 10% of the population will need these additional indicated mental health services.

Kaufmann and Hepburn note that there is a need for both services and supports. *Services*, or formal intervention strategies, tend to be provided by licensed personnel, to be more clinical in focus, be evidence-based, and be evaluated for efficacy. *Supports* can be less formal; may be provided by families, volunteers, paraprofessionals or unlicensed personnel; and maybe more informational, educational, or supportive in nature, with particular sensitivity to the cultural and linguistic backgrounds of the families.

There have been numerous descriptions of tiered service systems, usually involving three or four levels (eg. Gascoigne, 2006; O'Donnell, Scott and Stanley, 2008; Zeanah, Nagle, Stafford, Rice and Farrer, 2004). Although there are some variations between these models, they share common features:

- All are based on the notion of a strong universal service level with a focus on promoting positive health and development
- All seek to address the needs of the majority of children within this universal service level
- All involve an expanded role for specialist services

The integrated tiered system differs in approach from the current system in a number of important ways:

- It has the capacity to respond to emerging problems and conditions, rather than waiting until problems become so entrenched and severe that they are finally eligible for service;
- it focuses on targeting problems as they emerge through the secondary and tertiary layers, rather than people as risk categories, thus avoiding unnecessary stigmatising;
- it aims to drive expertise down to universal and secondary services, facilitating collaboration and strengthening their capacity to deliver prevention and early intervention strategies; and
- it would have outreach bases co-located with universal services to facilitate collaboration and consultant support.

Borrowing a term coined by Feinstein, Duckworth and Sabates (2008), we might call this combination of strong universal services and tiered secondary and tertiary services ***progressive universalism***. This approach aims to provide support and intervention on

a needs basis within a system that recognises the entitlement of all children and families to such support. An important objective is to identify those with greatest need at the earliest possible opportunity and to provide appropriate support.

For an integrated tiered system of services to function effectively, two main conditions need to be met:

- First, the capacity of the universal service system to meet the needs of all young children and families must be strengthened
- Second, the roles of the secondary and tertiary services must be expanded to include support to universal service providers

We will now examine each of these conditions in turn.

### **Strengthening universal services**

There are number of ways in which the capacity of universal services to cater for all children can be strengthened. With the particular needs of young children with developmental disabilities in mind, we will focus on two of these strategies – the use of progressive or hierarchical intervening processes, and the application of principles of universal design.

The first strategy involves the use of ***progressive or hierarchical intervening processes*** to address the emerging or additional needs of children within universal service settings. Various models of hierarchical intervening processes have been developed. These include:

- A 'building blocks' model to promote the inclusion of young children with disabilities in early childhood programs (Sandall and Schwartz, 2002)
- A 'teaching pyramid' model to promote social emotional development and prevent the development of challenging behaviour (Fox, Dunlap, Hemmeter, Joseph and Strain, 2003; Hemmeter, Ostrosky and Fox, 2006).
- A hierarchical intervention system for promoting positive peer relationships in young children with disabilities (Brown, Odom and Conroy, 2001)
- The 'response to intervention' strategies developed for school-age children (Barnett, Elliott, Wolsing, Bunger, Haski, McKissick and Vander Meer, 2006; Bender and Shores, 2007; Fuchs and Fuchs, 2005; Fuchs, Mock, Morgan and Young, 2003; Jimerson, Burns and VanDerHeyden, 2007) and their early childhood counterpart, the 'recognition and response' model (Coleman, Buysse and Neitzel, 2006; FPG Child Development Institute, 2008).

The first of these, the ***building blocks*** model (Sandall and Schwartz, 2002), has four key components. The foundation – a high-quality early childhood program – is important

for all children. The remaining three components may be appropriate for some children for some of their learning objectives. The intensity and specificity of each successive component increases. The four building blocks are:

- *High-quality early childhood programs.* A high-quality program is a necessary but not sufficient condition for meeting the unique needs of children with disabilities or other additional needs.
- *Curriculum modifications and adaptations.* Changes may be needed to activities, routines and learning areas in order to include children with disabilities and other additional needs in the classroom and to enhance their participation.
- *Embedded learning opportunities.* Children's learning of particular skills can be enhanced by embedding or integrating planned opportunities to use these skills within the usual classroom activities and routines.
- *Explicit child-focused instructional strategies.* Some children will need more explicit instruction in order to learn particular skills.

The **teaching pyramid** approach (Fox, Dunlap, Hemmeter, Joseph and Strain, 2003; Hemmeter, Ostrosky and Fox, 2006) has been developed specifically to promote social emotional development, provide support to children's appropriate behaviour, and prevent challenging behaviour involves four levels of support and intervention. It involves four levels of support and interventions:

- *Positive relationships with children, families, and colleagues.* The foundation of an effective early education program must be positive, supportive relationships between teachers and every child, as well as with families and other professionals.
- *Classroom preventive practices.* The classroom environment (including adult child interactions and the structure of activities) affects children's behaviour. Changes in the environment can support the development and use of appropriate behaviour in the children. This involves a combination of giving children positive attention for their prosocial behaviour, teaching them about routines and expectations, and making changes to the physical environment, schedule, and materials. These preventive practices will encourage children's engagement in daily activities, and prevent or decrease the likelihood of challenging behaviour.
- *Social and emotional teaching strategies.* Some children need explicit instruction to ensure that they develop competence in emotional literacy, and an impulse control, interpersonal problem-solving, and friendship skills.
- *Intensive individualised interventions.* A few children are likely to continue to display challenging behaviour and will need planned intensive individualised interventions in the form of Positive Behaviour Support (Carr, Dunlap, Horner, Koegel, Turnbull,

Sailor, Anderson, Albin, Koegel and Fox, 2002; Crimmins, Farrell, Smith and Bailey, 2007; and Koegel, Koegel and Dunlap, 1996).

When the three lower levels of the pyramid are in place, only about 4% of the children in a classroom or program will require more intensive support. The key implication here is the most solutions to challenging behaviours are likely to be found by examining adult behaviour and overall classroom practice, not by singling out individual children for specialised intervention.

Another hierarchical intervention approach has been developed by Brown, Odom and Conroy (2001) to help interventionists in deciding how to promote the peer interactions of young children with peer-related social competence difficulties in natural environments. Like the two previous hierarchical approaches, this model makes developmentally appropriate and inclusive early childhood programs the foundation for improved peer interactions.

The fourth example of hierarchical intervening approaches is the **response to intervention** (or response to instruction) set of strategies developed for identifying and meeting the learning and behavioural needs of children in schools (Bender and Shores, 2007; Fuchs and Fuchs, 2005; Fuchs, Mock, Morgan and Young, 2003; Jimerson, Burns and VanDerHeyden, 2007; National Association of State Directors of Special Education, 2005). Several variations of this approach have been described, but all are based on an assumption that all children can be taught effectively if the following conditions are met:

- Student progress is monitored to inform the teaching strategies used
- Intervene early when students have difficulty learning
- Use research-based, scientifically validated interventions/instruction, to the extent available.
- Use a multi-tiered approach to providing interventions of increasing intensity according to the individual child's needs
- a problem-solving approach to identify and evaluate instructional strategies
- an integrated data collection and assessment system to monitor student progress and guide decisions at every level.

In the early childhood context, this approach is called the **recognition and response** model (Coleman, Buysse and Neitzel, 2006; FPG Child Development Institute, 2008). This is designed to help parents and teachers respond as early as possible to learning difficulties in young children who may be at risk for learning disabilities, beginning at age 3 or 4, before they experience school failure and are deemed eligible for specialist services. It is based on the premise that parents and teachers can learn to recognize critical early warning signs that a young child may not be learning in an expected manner and to respond in ways that positively affect a child's early school success. In this approach, there is limited reliance on formal diagnosis and labeling. Instead, the emphasis is on a systematic approach to responding to early learning difficulties that

includes assessing the overall quality of early learning experiences for all children and making program modifications, tailoring instructional strategies, and providing appropriate supports for individual children who struggle to learn (Coleman, Buysse and Neitzel, 2006).

The Recognition and Response system includes four essential components:

- An intervention hierarchy entailing three tiers of instruction and intervention – these involve increasing levels of intensity of instruction and intervention that correspond directly to children’s needs for support.
- Screening, assessment, and progress monitoring to guide the teacher’s decision to move a child from one tier to the next.
- Research-based curriculum, instruction, and intervention.
- Collaborative problem-solving.

Although there are some variations between the four progressive or hierarchical intervening approaches just outlined, they have the following key features in common:

- All are based on the provision of strong universal services with a prevention and promotion focus
- All seek to meet as many of the needs of as many children as possible within mainstream settings
- All seek to respond to emerging problems, and to have well-developed surveillance and monitoring procedures
- All use a systematic approach to providing interventions of increasing intensity

Another way of strengthening the capacity of universal early childhood services to meet the needs of all young children and families is to develop programs based on the principles of **universal design**. In its original form, universal design is an approach to the design of all products and environments to be as usable as possible by as many people as possible regardless of age, ability, or situation. Originally developed by designers, architects and engineers at the Centre for Universal Design at North Carolina State University (<http://www.design.ncsu.edu/cud/>) to provide guidance in the design of environments and products, it has since been applied to educational and other settings (Blagojevic, Twomey and Labas, 2002; Reidman, 2002).

The Council for Exceptional Children (1999) outlines what this involves:

In terms of learning, universal design means the design of instructional materials and activities that makes the learning goals achievable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember. Universal design for learning is achieved by means of flexible curricular materials and activities that provide alternatives for students with differing abilities. A universally-designed curriculum offers multiple means of representation to give learners various ways of acquiring

information and knowledge, multiple means of action and expression to provide learners alternatives for demonstrating what they know, and multiple means of engagement to tap into learners' interests, challenge them appropriately, and motivate them to learn. These alternatives are built into the instructional design and operating systems of educational materials - they are not added on after-the-fact.

To use an engineering or building term, they are not *retro-fitted*, a process of adding or adapting existing design features that is often difficult and expensive to do and produces inelegant solutions. In the early childhood intervention context, there are many examples of retro-fitting to accommodate the needs of children with disabilities – such as building ramps for children in wheelchairs, widening doors, modifying the visual and acoustic properties of rooms, etc.

The implications of this concept of universal design for early childhood services are beginning to be explored (Conn-Powers, Cross, Traub and Hutter-Pishgahi, 2006; Darragh, 2007). For instance, Conn-Powers et al. (2006) suggest that the goal should be to design early education programs that meet the needs of all learners within a common setting rather than relying solely upon specialised programs and settings. Early childhood services should plan learning environments and activities that cater for a diverse population – that is, universally designed settings in which *all* children and their families can participate and learn.

These two strategies - the use of progressive or hierarchical intervening processes, and the application of principles of universal design – contribute to the first of the conditions needed for an integrated tiered system of services to function effectively, namely, strengthening the capacity of the universal service system to meet the needs of all young children and families. We will now explore ways of meeting the second condition – expanding the roles of the secondary and tertiary services include support to universal service providers.

### **Expanding the role of specialist service providers**

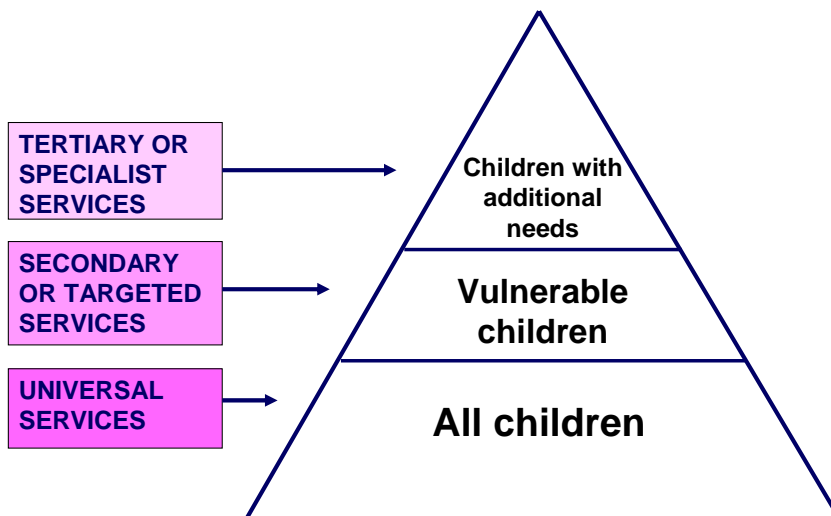
Even within a strengthened universal service system, catering for children with additional needs - will require specialist input. For instance, in the case of children with developmental delays and disabilities, it has long been recognised that it is not enough for them to simply be enrolled in mainstream programs. Attending mainstream services constitutes a necessary but not sufficient condition for true inclusion: for such children to participate meaningfully in the activities of the program and to benefit fully from the program, they need additional specialised support (National Professional Development Centre on Inclusion, 2007; Odom, Schwartz and ECRIL investigators, 2002).

Accounts of how such specialist input might be provided have been given in the context of speech and language therapy services (Gascoigne, 2006, 2008), infant and child mental health services (Kaufmann and Hepburn, 2007; Perry, Kaufmann and Knitzer, 2007), and special education services (Gallagher, 2006).

In a position paper written for the Royal College of Speech and Language Therapists in the UK, Marie Gascoigne (2006, 2008) has developed a model for supporting children with speech, language and communication needs within integrated children's services. The focus of her model is the role of the speech and language therapist, but the principles outlined are applicable to other allied health professionals working with children and to other professional colleagues within integrated children's services. The development of the model was prompted by policy developments in the UK that sought to integrate delivery of services around the child and their family, recognizing that *all* agencies working with children had a key role to play in *all* aspects of the child's development in order for them to achieve positive outcomes. Other elements of the policy initiatives included an increased focus on health promotion, and on the inclusion of children with special (or additional) needs in mainstream settings.

To achieve these aims, services are being redesigned services so as to meet the needs of *all children*, including those who are *vulnerable* and/or have *additional specialist needs*, as locally and flexibly as possible. Vulnerable children and those with additional needs form part of the population of 'all children'. In an inclusive society, specialist and targeted services for these children should be integral to universal mainstream provision. The integration of education, health and social care for children means they should be able to access all the services they require – whether universal, targeted or specialist – flexibly and locally wherever possible. For example, children with additional needs may access universal, targeted and specialist services from all agencies, while the majority of children will access universal service only.

### TIERED SERVICE SYSTEM



In considering the role that speech and language therapists might play in such a system, Gascoigne suggests that they can make a valuable contribution by strengthening the capacity of universal services to meet the language needs of all children. In developing language skills, all children benefit most when given opportunities and motivation to interact with others, as well as feedback on the success of their communicative attempts. For children with speech and language impairments, it is even more critical that they have such experiences, so the more linguistically rich and motivating the mainstream early childhood environment, the more such children will benefit. Speech and language therapists can therefore contribute to the language development of *all* children as well as those with exceptional language needs by promoting the quality of the overall language environment in universal early childhood services.

A similar case had been made regarding infant and child mental health services by Perry, Kaufmann and Knitzer (2007), Kaufmann and Hepburn (2007), and Zeanah, Nagle, Stafford, Rice and Farrer (2004). According to Zeanah et al. (2004), enhancing relationships between infants, parents, caregivers, and service providers through supportive child and family service systems is a key to promoting mental health in infants, and therefore infant mental health should be integrated into all child and family service systems. Kaufman and Hepburn (2007) argue that addressing the risk factors that lead to social and emotional problems in children requires a population-based public health framework in which the services and supports needed by families are embedded within the daily routines and cultural rituals of young children and their families. The responsibility for early childhood mental health lies with *all* those who provide services to young children and families. Rather than a discrete mental health service system for young children and families, it is argued that most mental health services and supports can be infused in the services and environments that those children are already accessing in their communities:

Young children and their families need a full array of formal and informal mental health services and supports that are embedded within early childhood programs and environments and available to parents and other caregivers. A continuum of comprehensive services include those focused on promoting positive well-being, preventing social emotional problems, and intervening when problems arise. A system needs to be value driven and have a shared understanding and commitment by all partners across service systems (early care and education, mental health, early intervention etc.). Families must have a voice and a leadership role in guiding and designing the system and services most meaningful to them. (Kaufman and Hepburn, 2007, p. 71)

Another example of a proposal to reconfigure the role of specialist services, this time in the field of special education, has been developed by Gallagher (2006). He envisages three possible futures for the special education field: maintaining the status quo; making a deliberate effort to bring special education back under the general education administration as one component of the larger system; or designing a special services unit of professionals who provide multidisciplinary services for children with a wide range of needs. This third option involves existing specialist / tertiary disability services expanding their role to provide multidisciplinary consultation as well as provision of

direct services to children with developmental disabilities, all within the context of mainstream education. Gallagher's model differs from traditional special education in a number of ways, one difference being that services would be delivered to all students who need them, including children who do not meet a level of eligibility for special services but who do need additional support. This would eliminate the need to test students for eligibility for services, and shift the focus of testing to determining the particular educational and social needs of the child.

The approaches just described have been developed in the context of different specialist services, but share a number of features in common:

- They view specialist services as having a valuable role to play in strengthening the learning environments in mainstream settings
- They see responsibility for children with additional needs as lying with *all* those who provide services to young children and families, rather than being solely the job of specialist service providers
- They envisage specialist services being available to children according to need rather than only to those who meet certain eligibility criteria

In this section, it has been argued that the part of the solution to the problems facing both the general early childhood and the specialist early childhood intervention fields lies in strengthening the capacity of the universal system to meet the needs of all children and families. This can be done by building an integrated and tiered system of universal, secondary and tertiary services, and by expanding the role of specialist services in supporting universal services. In the next section, what such a transformation might mean for early childhood intervention services will be explored.

## **IMPLICATIONS FOR EARLY CHILDHOOD INTERVENTION SERVICES**

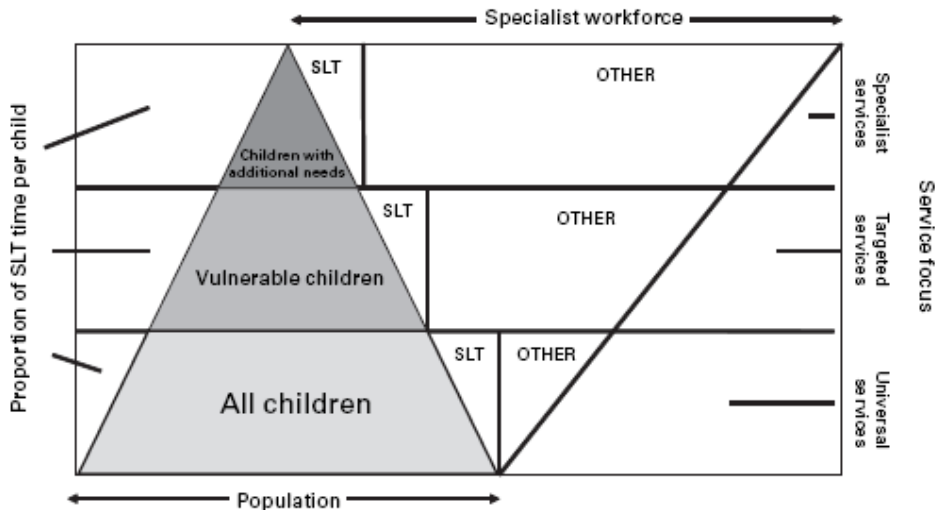
The changes in the configuration of services and in service delivery that have been outlined in this paper have profound implications for early childhood intervention practice. Four implications will now be considered: the need to expand the roles that early childhood intervention practitioners perform; the challenge of transferring skills to others who are involved with young children with developmental disabilities; the importance of building links with other services; and changing ways in which we view children with disabilities.

### **Expanding role for early childhood intervention services**

Reference has been made already to the need for specialist services to expand their roles. In the case of early childhood intervention, this means that, in addition to their traditional tertiary / specialist role in providing direct support to children with developmental disabilities and their families, early childhood interventionists need to play a greater role in providing consultation support to secondary and universal services – assisting with surveillance and screening, designing programs to meet the diverse

learning needs of children, and sharing knowledge and skills with primary care providers.

In the case of speech and language therapists, Gascoigne (2006, 2008) has described how this might work.



In this figure, the shaded triangle shows the population of children grouped according to their needs. (The divisions are not shown proportionally – as a very rough guide, we would expect to find 85% of so of children in the bottom group, 10-12% in the second group, and 3-5% in the top group.) The inverted triangle to the right of the shaded triangle shows the proportion of time the specialist workforce (including speech and language therapists) would spend with each group. Again, the divisions are not representational, but do show that direct work with children and families would continue to be a major role, with a smaller proportion of time spent working with secondary and universal settings and service providers. There would also be a corresponding shift in the roles performed by the mainstream workers, with some time devoted to providing tailored programs for children with additional needs.

In this model, speech and language therapists are part of the workforce at the universal level and not, as has historically been the case, purely at the level of tertiary / specialist and - to some degree – secondary / targeted services. Gascoigne argues that it is equally relevant for speech and language therapists to be working at a universal level as at a specialist level with the children with the most complex needs. The nature of the contribution will be different according to whether the therapist is focusing on the child's impairment, activity or participation. The distinction between impairment, activity and participation that is made by the World Health Organisation in its International Classification of Functioning, Disability and Health (WHO, 2001, 2002). **Impairments** refer to the actual body functions and structure within the child, **activity** to the impact of the impairment on the child's ability to do certain activities, and **participation** on the

child's ability to participate as they would like within family and community settings. The traditional focus of speech and language therapists and other specialists had been on the child's impairment, but it is equally important for them to be involved in addressing the impact that impairments may have on the child's ability to do particular activities, as well as the child's ability to participate meaningfully in family and community settings.

### **Transferring skills to others**

A second implication for early childhood interventionists concerns their role in transferring skills to others. As noted earlier, what early childhood interventionists need to be constantly mindful of is what happens in the times and settings when they are not directly working with the child and family. The challenge is to ensure that what children experience and learn in those other settings promotes their development and learning effectively. To achieve this, we need to ensure that the environments and experiences are of high quality, identify the learning opportunities that arise in the everyday routines and activities that occur in these settings, and show how these can be used to build the child's skills. We also need to skill up the adults who are with the children in these settings – their parents, caregivers and early childhood professionals - so they can capitalise on these learning opportunities.

Thus, it can be argued that helping others develop the skills necessary to perform this role lies at the heart of the early childhood intervention enterprise (Gascoigne, 2006; Mahoney and Wheeden, 1997). In considering the particular contribution of speech and language therapists, Gascoigne (2006) argues that 'successful training of others involved in the child's care is crucial to achieving real change for the child in terms of their speech, language, communications and eating and drinking skills.' Similarly, Mahoney and Wheeden (1997) propose that the central purpose of family-centered early childhood intervention services is to support and enhance the effectiveness of parents as caregivers and primary influences on their children's development. There is evidence that promoting caregiver responsiveness to young children with developmental disabilities has both short- and long-term benefits for the children's cognitive and socio-emotional competence (Trivette, 2003). Indeed, it has even been shown that early childhood intervention services are *only* effective at enhancing the development of young children with developmental disabilities when they promote mothers' responsiveness to their children, regardless of the amount of services provided to children or the range of family services parents receive (Mahoney, Boyce, Fewell, Spiker and Wheeden, 1998).

All of this suggests that the early childhood interventionist's role in transferring skills to parents, caregivers and other professionals is of even greater importance in a system in which the majority of their needs are met within universal settings.

### **Building links with other services**

A third implication of the proposed shift in practice concerns the need for early childhood intervention services to build strong links with other services. Such linkages need to be both 'horizontal' and 'vertical'. 'Horizontal' linkages are those with services that address

aspects of child and family needs that early childhood intervention services are unable to meet on their own (eg. health services, mental health services, financial and employment services, housing services, and so on). Building better coordinated service networks with such services is essential if the often complex needs of families of children with developmental disabilities are to be met in an integrated and holistic fashion. 'Vertical' linkages are those between universal, secondary and tertiary services, as described earlier.

The need for better integrated service systems has been widely recognised, and efforts to build stronger service networks are being undertaken in many countries and states. In the UK, the *Sure Start* initiatives ([www.surestart.gov.uk](http://www.surestart.gov.uk)) have increasingly focused on integration of services. In Australia, the same focus is evident in Federal programs such as Communities for Children, and State programs such as *Best Start* in Victoria and *Families First* in New South Wales. Within early childhood services, there is an international trend to the trend within early childhood services towards a blending of early learning and care services (Best Start Expert Panel on Early Learning, 2006; CCCH, 2007; Elliott, 2006), and the development of integrated early childhood and family support services and systems that are inclusive of all children and families (CCCH, 2008a). All of these developments fit neatly with the early childhood intervention agenda proposed in this paper.

### **Changing conceptions of children with disabilities**

The final implication is that the move to embed early childhood intervention services within a strengthened universal service system challenges our underlying perceptions of children with developmental disabilities: instead of thinking of them primarily as children with disabilities, focusing on the differences between them and normally developing children, and designing services to cater for their disabilities, we need to think of them primarily as children, focusing on the needs they have in common with other children, and designing programs and services to promote their capacity to participate meaningfully in family and community activities. This means focusing on the *normality* of disability (Burke, 2008), recognising that children are children whatever their label. As Shonkoff and Phillips (2000) have argued,

'Inevitable tensions between the generic and idiosyncratic characteristics of children and families create a complex agenda for the early childhood field. All children, with or without biological or environmental vulnerabilities, do best when they are reared in a nurturing environment that responds to their individuality and invests in their well-being. All families, regardless of their material resources, depend upon informal social supports and varying levels of professional service. Thus, despite the challenges of special needs, the general principles of development apply to all children and families across the broad array of early childhood service systems.' (p. 371).

## What are the risks?

However strong the rationale for system change, there is always the risk that valuable features of the existing service system may be compromised or lost in the process. In order to guard against this happening, we need to consider what these risks might be.

One risk is that there will be a dilution and fragmentation of specialist skills and services. If existing specialist services are completely disbanded and if specialist staff spend most or all of their time in secondary consultation roles, then there is a considerable risk that the current knowledge and skills of the early childhood intervention field could be lost over time. This will not happen if early childhood interventionists continue to have a common professional base, and continue to spend the majority of their time in providing direct support to children and families.

Another risk is that parents of children with disabilities might be cut off from contact with other parents of children with disabilities. We know that such contact is valued by many parents (Kerr and McIntosh, 2000; Law, Rosenbaum, King, King, Burke-Gaffney, Moning, Szkut, Kertoy, Pollock, Viscardis and Teplicky, 2003; Santelli, Poyadue and Young, 2001), and therefore we will need to continue to create opportunities for them to meet. However, we also need to recognise that the value of such contacts for parents is contextual, that is, it is important for them in the context of the current system which is only partially inclusive at best, and is still predominantly based on an assumption that the needs of children with disabilities and their families are best met within segregated settings. It remains to be seen if the need for contact with other parents of children with similar disabilities will reduce as the service system becomes more inclusive.

A third risk is that, in highlighting the needs that children with disabilities share with other children, we might lose sight of their particular needs. In discussing diagnoses of psychopathologies, Pennington (2002) makes some observations that are equally pertinent to diagnoses of children with disabilities;

For some mental health practitioners, diagnoses are aversive because they do not capture the individuality of the patient's problems. Robin Morris (1984) has said, "Every child is like all other children, like some other children, and like no other children"; that is, some characteristics are species-typical, others are typical of groups within the species, and still others are unique to individuals. It is important for diagnosticians and therapists to have a good handle on which characteristics fall into which category.

Pennington suggests that it is just as unhelpful to insist that there is no such thing as psychopathology (or disability) because everyone has the same needs as it is to claim that there are no psychopathologies (or disabilities) because everyone is different. Understanding and treating psychopathology (or disability) depends on there being 'middle-level' variation, on differentiating characteristics of groups within our species. What we need to aim at, therefore, is a balance between meeting the needs that children with disabilities share with all other children, and their needs for specialist support.

## What are the advantages?

From an early childhood intervention perspective, there is much to be gained from strengthening the universal service system, building better integrated service networks, and embedding specialist services within universal services. If all these efforts were successful, then young children with disabilities would benefit from increased opportunities for meaningful inclusion in mainstream early childhood settings, and from an expanded range of environments that understood how to meet their learning needs. Their families would also benefit from more inclusive services, as well as from a service system that is able to meet their wider needs in a more coherent fashion.

Moreover, both the early childhood intervention sector and the mainstream early childhood sector stand to gain considerably from an integration of their respective philosophies and practices. Specialist early childhood intervention service providers bring an understanding of the vicissitudes of development and how one can individualise and adapt programs to meet the needs of particular children. Mainstream service providers have an understanding of how to create safe and stimulating learning environments and activities that promote the development of young children. Combining these two complementary sets of knowledge and skills has the potential to create high quality early childhood programs that benefit *all* children.

## WHERE TO NOW?

In the light of these developments, where should the early childhood intervention sector be concentrating its efforts? There are three general strategies that can provide a framework for moving forward: building on our existing strengths, consolidating emerging skills and developing new skills, and designing and piloting new models of working.

First, we need to ***build on existing strengths***. These include knowledge of the impact that disabilities can have upon development, knowledge of evidence-based ways of ameliorating the effects of these disabilities (eg. Buysse and Wesley, 2006; Dunst, 2007), skills in working in partnership with parents / family-centred practice (eg. Davis, Day and Bidmead, 2002; Moore and Larkin, 2006), and skills in working in partnership with other professionals (eg. Kilgo, Aldridge, Denton, Vogtel, Vincent, Burke and Unanue, 2003; Sandall, McLean and Smith, 2000).

Second, we need to ***consolidate emerging skills and develop new skills***. These include skills in using natural learning opportunities (Bruder and Dunst, 1999; Dunst and Bruder, 2002; Hanft and Pilkington, 2000; Noonan and McCormick, 2005), relationship-strengthening approaches (Moore, 2007a, 2008d), consultation and coaching skills (Buysse and Wesley, 2005; Hanft, Rush and Shelden, 2004), and outcomes-based planning and evaluation (Moore, 2007b).

Third, we need to ***design and pilot new models of working***. These should focus on building an expanded role within a tiered service system (eg. providing consultation

support to mainstream service providers), developing skills in the use of progressive intervening strategies (response to intervention and other staged models of intervention), and exploring the implications of applying universal design principles to the early childhood system (creating early childhood environments that are designed to cater for all children and their families).

## CONCLUSIONS

The world has changed dramatically over the past 50 years, and continues to do so – the service models and systems that once worked well no longer do so as effectively. While services may not be ‘broken’ in the sense of being dysfunctional, they do need to be reconfigured to meet the altered circumstances in which families are raising young children – and this reconfiguration is already underway. It should be acknowledged that there is no such thing as a perfect service system – all systems are compromises and therefore do not work perfectly for all consumers and circumstances. In moving to a different model, we will be swapping the virtues and vices of one system for the virtues and vices of another. However, where there are good grounds for changing from one system to another, as I have argued here, then we should make the change.

It will be clear that this is not a task that the early childhood intervention sector can undertake on its own: it cannot transform itself in the ways proposed in this paper without there being a matching change in the mainstream service system. As noted already, the early childhood intervention service system has traditionally functioned as a segregated system that could be difficult to enter but could also be difficult to get out of. As early childhood intervention philosophy and practice moves towards inclusive practices, it becomes increasingly important that specialist early childhood intervention and mainstream early childhood services seek to synchronise and blend their practices. As Johnston (2006) has argued, a redefinition of the boundaries of the early childhood intervention field and a rethinking of its relationship to mainstream services is needed.

What is striking about the solutions proposed in this paper is the convergence of solutions to the problems facing the mainstream and specialist service systems: the progressive or hierarchical intervening strategies outlined have all been developed in the context of services for children with additional needs, yet can be seen as important strategies in the development of a truly universal and inclusive mainstream service system. This means that early childhood intervention service providers have a set of knowledge and skills that can play a vital role in making the changes in services that have been proposed here, thereby contributing to improved outcomes for all children.

Early childhood intervention services cannot make the necessary changes alone, but need to do so in partnership with the wider system of child and family services. Early childhood intervention practitioners have the knowledge, skills and tools to make a major contribution to ensuring that early childhood services are truly inclusive and meet all children’s needs effectively. The challenge is whether we are sure enough of our identity and have sufficient mastery of our skills to move away from our segregated services and embed our services in the universal system.

In seeking to fashion a new integrated system, we have to go beyond the evidence – there are no randomised control trials to guide us in designing such a system, only the recognition of the need to change and the powerful logic behind the universal model presented here.

## REFERENCES

- Aboelata, M. J. (2004). **The Built Environment and Health: 11 Profiles of Neighborhood Transformation**. Oakland, California: Prevention Institute.
- Bailey, D.B., McWilliam, R.A., Buysse, V. and Wesley, P.W. (1998). Inclusion in the context of competing values in early childhood education. **Early Childhood Research Quarterly**, 13 (1), 27-47.
- Barnett, D.W., Elliott, N., Wolsing, L., Bungler, C.E., Haski, H., McKissick, C. and Vander Meer, C. (2006). Response to intervention for young children with extremely challenging behaviors: What it might look like. **School Psychology Review**, 35 (4), 568-582.
- Bender, W.N. and Shores, C. (2007). **Response to Intervention: A Practical Guide for Every Teacher**. Thousand Oaks, California: Corwin Press and the Council for Exceptional Children.
- Best Start Expert Panel on Early Learning (2006). **Early learning for every child today: A framework for Ontario early childhood settings**. Toronto, Ontario: Ministry of Children and Youth Services.  
<https://ospace.scholarsportal.info/bitstream/1873/8768/1/274085.pdf>
- Blagojevic, B., Twomey, D. and Labas, L. (2002). **Universal Design for Learning: From the Start**. FACTS online, Vol. 6 (Winter). Orono, Maine: Centre on Community Inclusion and Disability Studies, University of Maine.  
<http://www.ccids.umaine.edu/resources/facts/facts6/udl.htm>
- Brown, W. H., Odom, S. L. and Conroy, M. A. (2001). An intervention hierarchy for promoting preschool children's peer interactions in natural environments. **Topics in Early Childhood Special Education**, 21 (3), 162-175.
- Bruder, M.B. and Dunst, C.J. (1999). Expanding learning opportunities for infants and toddlers in natural environments: A chance to reconceptualize early intervention. **Zero to Three**, 20 (3), 34-36.
- Burke, P. (2008). **Disability and Impairment: Working with Children and Families**. London, UK: Jessica Kingsley.
- Buysse, V. and Wesley, P.W. (2005). **Consultation in Early Childhood Settings**. Baltimore, Maryland: Paul H. Brookes.

- Buyse, V. and Wesley, P.W. (2006). **Evidence-Based Practice in the Early Childhood Field**. Washington, DC: Zero to Three.
- Carr, E.G., Dunlap, G., Horner, R.H., Koegel, R.L., Turnbull, A., Sailor, W., Anderson, J., Albin, R., Koegel, L.K. and Fox, L. (2002). Positive Behavior Support: Evolution of an applied science. **Journal of Positive Behavior Interventions**, 4 (1), 4-16.
- Centre for Community Child Health (2006). **Services for children and families: An integrated approach**. *CCCH Policy Brief 4*. Melbourne, Victoria: Centre for Community Child Health.  
[http://www.rch.org.au/ccch/pub/index.cfm?doc\\_id=10475](http://www.rch.org.au/ccch/pub/index.cfm?doc_id=10475)
- Centre for Community Child Health (2007). **Early years care and education**. *CCCH Policy Brief 8*. Parkville, Victoria: Centre for Community Child Health, Royal Children's Hospital.  
[http://www.rch.org.au/emplibrary/ccch/PB8\\_EYCE\\_References.pdf](http://www.rch.org.au/emplibrary/ccch/PB8_EYCE_References.pdf)
- Centre for Community Child Health (2008). **Evaluation of DEECD Children's Centres: Literature review**. Melbourne, Victoria: Office for Children and Early Childhood Development, Department of Education and Early Childhood Development.
- Coleman, M. R., Buyse, V., and Neitzel, J. (2006). **Recognition and response: An early intervening system for young children at risk for learning disabilities**. Chapel Hill, North Carolina: Frank Porter Graham Child Development Institute, The University of North Carolina at Chapel Hill.
- Collins, D.J. and Lapsley, H.M. (2008). **The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05**. National Drug Strategy Monograph Series No. 66. Canberra, ACT: Commonwealth Department of Health and Ageing.
- Conn-Powers, M., Cross, A., Traub, E. and Hutter-Pishgahi, L. (2006). The universal design of early education: Moving forward for all children. **Beyond the Journal: Young Children on the Web**, September 2006.  
<http://www.journal.naeyc.org/btj/200609/>.
- Council for Exceptional Children (1999). Universal design. **Research Connections, Number 5** (Fall), p. 2.  
<http://www.cec.sped.org/Content/NavigationMenu/AboutCEC/International/StepbyStep/rc5sec1.pdf>
- Crimmins, D., Farrell, A.F., Smith, P.W. and Bailey, A. (2007). **Positive Strategies for Students with Behavior Problems**. Baltimore, Maryland: Paul H. Brookes.
- Darragh, J. (2007). Universal design for early childhood education: Ensuring access and equity for all. **Early Childhood Education Journal**, 35 (2), 167-171.

- Davis, H., Day, C. and Bidmead, C. (2002). **Working in Partnership with Parents: The Parent Adviser Model**. London: The Psychological Corporation.
- Drielsma, P. (2005). Unpacking the argument for universally designed and delivered-early childhood services. **Developing Practice: The Child, Youth and Family Work Journal**, 14 (Summer), 48-57.
- Dunst, C.J. (2007). Early intervention for infants and toddlers with developmental disabilities. In S.L. Odom, R.H. Horner, M.E. Snell and J. Blacher, J. (Eds.). **Handbook of Developmental Disabilities**. New York: Guilford Press.
- Dunst, C.J. and Bruder, M.B. (2002). Valued outcomes of service coordination, early intervention, and natural environments. **Exceptional Children**, 68 (3), 361-375.
- Eckersley, R. (2005). **Well and Good: Morality, Meaning and Happiness**. Melbourne, Victoria: Text Publishing.
- Eckersley, R. (2008). **Never better — or getting worse? The health and wellbeing of young Australians**. Weston, ACT: Australia 21.
- Elliot, A. (2006). Early Childhood Education: pathways to quality and equity for all children. **Australian Education Review**, No 50. Melbourne, VIC: Australian Council of Educational Research (ACER) Press.
- Feinstein, L., Duckworth, K. and Sabates, R. (2008). **Education and the family: Passing success across the generations**. London, UK: Routledge.
- Fox, L., Dunlap, G., Hemmeter, M.L., Joseph, G.E. and Strain, P.S. (2003). The teaching pyramid: A model for supporting social competence and preventing challenging behaviours in young children. **Young Children**, 58 (4), 48-52.
- FPG Child Development Institute (2008). **Recognition and Response Implementation Guide**. Chapel Hill, North Carolina: FPG Child Development Institute, University of North Carolina.
- Fuchs, D. and Fuchs, L.S. (2005). Responsiveness to intervention: A blueprint for practitioners, policymakers, and parents. **Teaching Exceptional Children**, 38 (1), 57-61.
- Fuchs, D., Mock, D., Morgan, P.L. and Young, C.L. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. **Learning Disabilities Research & Practice**, 18 (3), 157-171.
- Gallagher, J.J. (2006). **Driving Change in Special Education**. Baltimore, Maryland: Paul H. Brookes.

- Gallagher, J. and Clifford, R. (2000). The missing support infrastructure in early childhood. **Early Childhood Research and Practice, 2** (1), e1-18
- Gallagher, J., Clifford, R. M. and Maxwell, K. L. (2004). Getting from here to there: To an ideal early preschool system. **Early Childhood Research and Practice, 6** (1),
- Gascoigne M. (2006). **Supporting children with speech, language and communication needs within integrated children's services**. RCSLT Position Paper. London, UK: Royal College of Speech and Language Therapists.
- Gascoigne, M. (2008). Change for children with language and communication needs: creating sustainable integrated services. **Child Language Teaching and Therapy, 24** (2), 133-154.
- Greenfield, S. (2008). **ID: The Quest for Identity in the 21st Century**. London, UK: Sceptre.
- Guernsey, L. (2007). **Into the Minds of Babes: How Screen Time Affects Children from Birth to Age Five**. New York: Basic Books.
- Guralnick, M.J. (2008). International perspectives on early intervention: A search for common ground. **Journal of Early Intervention, 30** (2), 90-101.
- Hallowell, E. (2006). **CrazyBusy: Overstretched, Overbooked, and About to Snap**. New York: Ballantine Books.
- Hamilton, C. and Denniss, R. (2005). **Affluenza: When too much is never enough**. St. Leonards, NSW: Allen and Unwin.
- Hanft, B.E. and Pilkington, K.O. (2000). Therapy in natural environments: The means or end goal for early intervention? **Infants and Young Children, 12** (4), 1-13.
- Hanft, B.E., Rush, D.D. and Shelden, M.L. (2004). **Coaching Families and Colleagues in Early Childhood**. Baltimore, Maryland: Paul H. Brookes.
- Hemmeter, M.L., Ostrosky, M. and Fox, L. (2006). Social and emotional foundations for early learning: A conceptual model for intervention. **School Psychology Review, 35** (4), 583-601.
- Heymann, J. (2007). **Poverty, Work and Education: The Key to Addressing the Social Determinants of Canadians' Health**. Testimony to the Sub-Committee on Population Health of the Senate Committee on Social Affairs, Science and Technology, March 28. Montreal, Quebec: McGill Institute for Health and Social Policy. McGill University.

- Jackson, M. (2008). **Distracted: The Erosion of Attention and the Coming Dark Age.** Amherst, New York: Prometheus Books. James, O. (2008). **The Selfish Capitalist: The Origins of Affluenza.** London, UK: Vermilion.
- James, O. (2008). **The Selfish Capitalist: The Origins of Affluenza.** London, UK: Vermilion.
- Jimerson, S.R., Burns, M.K and VanDerHeyden, A. (Eds.)(2007). **Handbook of Response to Intervention: The Science and Practice of Assessment and Intervention.** New York: Springer.
- Johnston. C. (2006). **Robust Hope: Finding a home for early childhood intervention in the new early years landscape.** Keynote address given at Early Childhood Intervention Australia (Victorian Chapter) Annual Conference, Melbourne, 18<sup>th</sup> August.
- Kaufmann, R.K. and Hepburn, K.S. (2007). Early childhood mental health services and supports through a systems approach. In D.F. Perry, R.K. Kaufmann and J. Knitzer (Eds). **Social and Emotional Health in Early Childhood: Building Bridges Between Services and Systems.** Baltimore, Maryland: Paul H. Brookes.
- Kawachi, I. and Kennedy, B. (2006). **The Health of Nations: Why inequality is harmful to your health.** New York: The New Press.
- Keating, D.P. and Hertzman, C. (1999). Modernity's paradox. In Keating, D.P. and Hertzman, C. (Eds.). **Developmental Health and the Wealth of Nations: Social, Biological, and Educational Dynamics.** New York: The Guilford Press.
- Kerr, S.M. and McIntosh, J.B. (2000). Coping when a child has a disability: exploring the impact of parent-to-parent support. **Child: Care, Health and Development, 26** (4), 309-321.
- Kids First Foundation (2003). **Report into the Cost of Child Abuse and Neglect in Australia.** Albion, Queensland: Kids First Foundation.
- Kilgo, J.L., Aldridge, J., Denton, B., Vogtel, L., Vincent, J., Burke, C. and Unanue, R. (2003). Transdisciplinary teaming: A vital component of inclusive services. **Focus on Inclusive Education, Vol. 1, # 1.**  
<http://www.udel.edu/bateman/acei/inclusivefall03.htm>
- Koegel, L.K., Koegel, R.L. and Dunlap, G. (Eds.)(1996). **Positive Behavioral Support: Including People with Difficult Behavior in the Community.** Baltimore, Maryland: Paul H. Brookes.
- Law, M., Rosenbaum, P., King, G., King, S., Burke-Gaffney, J., Moning, J., Szkut, T., Kertoy, M., Pollock, N., Viscardis, L. and Teplicky, R. (2003). Parent-to-parent

- support. **CanChild FCS Sheet #07**. Hamilton, Ontario, Canada: *CanChild* Centre for Childhood Disability Research, McMaster University.  
<http://canchild.interlynx.net/patches/FCSSheet7.pdf>
- Li, J., McMurray, A. and Stanley, F. (2008). Modernity's paradox and the structural determinants of child health and wellbeing. **Health Sociology Review**, **17** (1), 64-77.
- McCann, D., Barrett, A., Cooper, A., Crumpler, D., Dalen, L., Grimshaw, K., Kitchin, E., Lok, K., Porteous, L., Prince, E., Sonuga-Barke, E., Warner, J.O. and Stevenson, J. (2007). Food additives and hyperactive behaviour in 3-year-old and 8/9-year-old children in the community: a randomised, double-blinded, placebo-controlled trial. **The Lancet**, **370** (9598), 1560-1567.
- McMichael, A.J. (1993). **Planetary Overload: Global Environmental Change and the Health of the Human Species**. Cambridge, UK: Cambridge University Press.
- MacNaughton, G.M. (2006). **Respect for diversity: An international overview**. Working Paper 40. The Hague, The Netherlands: Bernard van Leer Foundation.  
[http://www.bernardvanleer.org/publication\\_store/publication\\_store\\_publications/respect\\_for\\_diversity\\_an\\_international\\_overview/file](http://www.bernardvanleer.org/publication_store/publication_store_publications/respect_for_diversity_an_international_overview/file)
- Mahoney, G., Boyce, G., Fewell, R., Spiker, D., and Wheeden, C.A. (1998). The relationship of parent-child interaction to the effectiveness of early intervention services for at-risk children and children with disabilities. **Topics in Early Childhood Special Education**, **18** (1), 5-17.
- Mahoney, G. and Wheeden, A. (1997). Parent-child interaction--the foundation for family-centered early intervention practice: A response to Baird and Peterson. **Topics in Early Childhood Special Education**, **17** (2), 165-184.
- Moore, T.G. (2007a). The nature and role of relationships in early childhood intervention services. Paper presented at *2<sup>nd</sup> International Conference of the International Society on Early Intervention*, Zagreb, Croatia, 14<sup>th</sup> -16<sup>th</sup> June.  
[http://www.rch.org.au/emplibrary/ccch/TM\\_ISEIConf07\\_Nature\\_role\\_rships.pdf](http://www.rch.org.au/emplibrary/ccch/TM_ISEIConf07_Nature_role_rships.pdf)
- Moore, T.G. (2007b). Outcomes-based early childhood intervention for young children with developmental disabilities and their families. Keynote presentation for the New Zealand Early Childhood Convention 2007 – *Pakiwaitara - Stories of the Land* – Rotorua, 26<sup>th</sup> September.  
[http://www.rch.org.au/emplibrary/ccch/TM\\_NZ\\_EC\\_Conv07\\_paper.pdf](http://www.rch.org.au/emplibrary/ccch/TM_NZ_EC_Conv07_paper.pdf)
- Moore, T.G. (2008a). Early childhood intervention services in Victoria: Where they have come from, where they are now, and where they are heading. Background paper prepared for DEECD ECIS Reform Project Advisory Committee, Melbourne, 21<sup>st</sup> May. Subsequently published in **Early Talk**, **22** (2 – Part 2), 4-9.  
<http://www.eciavic.org.au/publications>

Moore, T.G. (2008b). **Supporting young children and their families: Why we need to rethink services and policies.** *CCCH Working Paper No. 1 (revised November 2008)*. Parkville, Victoria: Centre for Community Child Health, Royal Children's Hospital.

[http://www.rch.org.au/emplibrary/ccch/Need\\_for\\_change\\_working\\_paper.pdf](http://www.rch.org.au/emplibrary/ccch/Need_for_change_working_paper.pdf)

Moore, T.G. (2008c). **Rethinking universal and targeted services.** *CCCH Working Paper 2 (August 2008)*. Parkville, Victoria: Centre for Community Child Health.

[http://www.rch.org.au/emplibrary/ccch/Rethinking\\_universal\\_target\\_services.pdf](http://www.rch.org.au/emplibrary/ccch/Rethinking_universal_target_services.pdf)

Moore, T.G. (2008d). The nature and significance of relationships in the lives of children with developmental disabilities. Paper presented at *Every Child Matters: National Conference on Children and Young People with Disability and their Families*, Melbourne, 15<sup>th</sup> May.

Moore, T.G. with Larkin, H. (2006). **'More Than My Child's Disability': A Comprehensive Review of Family-Centred Practice and Family Experiences of Early Childhood Intervention Services.** Melbourne, Victoria: Scope (Vic) Inc.

[http://www.rch.org.au/emplibrary/ccch/EY\\_Mod2\\_Reading.pdf](http://www.rch.org.au/emplibrary/ccch/EY_Mod2_Reading.pdf)

Nakazawa, D.J. (2008). Diseases like mine are a growing hazard. **Washington Post**, March 16 (p. B3).

National Association of State Directors of Special Education. (2005). **Response to intervention: Policy considerations and implementation.** Alexandria, Virginia: National Association of State Directors of Special Education.

National Professional Development Centre on Inclusion (2007). **Research synthesis points on early childhood inclusion.** Chapel Hill, North Carolina: National Professional Development Centre on Inclusion, FPG Child Development Institute, The University of North Carolina.

National Scientific Council on the Developing Child (2006). **Early Exposure to Toxic Substances Damages Brain Architecture.** (2006). NSCDC Working Paper No. 4. Waltham, Massachusetts: National Scientific Council on the Developing Child, Brandeis University. [www.developingchild.net/pubs/wp/toxins.pdf](http://www.developingchild.net/pubs/wp/toxins.pdf)

Noonan, M.J. and McCormick, L. (2005). **Young Children with Disabilities in Natural Environments: Methods and Procedures.** Baltimore, Maryland: Paul H. Brookes.

O'Donnell, M., Scott, D. and Stanley, F. (2008). Child abuse and neglect — is it time for a public health approach? **Australian and New Zealand Journal of Public Health**, 32 (4), 325-330.

- Odom, S.L., Horner, R.H., Snell, M.E. and Blacher, J. (2007). The construct of developmental disabilities. Ch.1 in S.L. Odom, R.H. Horner, M.E. Snell and J. Blacher, J. (Eds.). **Handbook of Developmental Disabilities**. New York: Guilford Press.
- Odom, S.L., Schwartz, I.S. and ECRll Investigators (2002). So what do we know from all this? Synthesis points of research on preschool inclusion. In S.L. Odom (Ed.). **Widening the Circle: Including Children with Disabilities in Preschool Programs**. New York: Teachers College Press.
- Pennington, B.F. (2002). **The Development of Psychopathology: Nature and Nurture**. New York: Guilford Press.
- Perrin, J.M., Bloom, S.R. and Gortmaker, S.L. (2007). The increase of childhood chronic conditions in the United States. **Journal of the American Medical Association**, **297** (24), 2755-2759.
- Perry, D.F., Kaufmann, R.K. and Knitzer, J. (2007). Building bridges: linking services, strategies, and systems for young children and their families. In D.F. Perry, R.K. Kaufmann and J. Knitzer (Eds). **Social and Emotional Health in Early Childhood: Building Bridges Between Services and Systems**. Baltimore, Maryland: Paul H. Brookes.
- Prüss-Üstün, A. and Corvalán, C. (2006). **Preventing disease through healthy environments: Towards an estimate of the environmental burden of disease**. Geneva, Switzerland: World Health Organisation.
- Reidman, B.L. (2002). **More Than Promising: Universal Design for Learning, Technology, and Brain Research Raise Hopes for Engaging All Learners**. FACTS online, Vol. 6 (Winter). Orono, Maine: Centre on Community Inclusion and Disability Studies, University of Maine.  
<http://www.ccids.umaine.edu/resources/facts/facts6/raisinghopes.htm>
- Richardson, S. and Prior, M. (2005). Childhood today. In S. Richardson and M. Prior (Eds.)(2005). **No Time to Lose: The Wellbeing of Australia's Children**. Melbourne, Victoria: Melbourne University Press.
- Rimland, B. (2007). **Dyslogic Syndrome: Why Millions of Kids are 'Hyper', Attention-Disordered, Learning Disabled, Depressed, Aggressive, Defiant, or Violent – and What We Can Do About It**. London, UK: Jessica Kingsley.
- Sandall, S., McLean, M.E. and Smith, B.J. (2000). **DEC Recommended Practices in Early Intervention / Early Childhood Special Education**. Longmont, Colorado: Sopris West.

- Sandall, S.R. and Schwartz, I.S., with Joseph, G.E., Chou, H.-Y., Horn, E.M., Lieber, J., Odom, S.L. and Wolery, R. (2002). **Building Blocks for Teaching Preschoolers with Special Needs**. Baltimore, Maryland: Paul H. Brookes.
- Santelli, B., Poyadue, F.S. and Young, J.L. (2001). **The Parent-to-Parent Handbook: Connecting Families of Children with Special Needs**. Baltimore, Maryland: Paul H. Brookes.
- Shonkoff, J.P. and Phillips. D.A. (Eds) (2000). **From Neurons to Neighborhoods: The Science of Early Childhood Development**. Committee on Integrating the Science of Early Childhood Development, National Research Council and Institute of Medicine. Washington, DC: National Academy Press.
- Stanley, F., Prior, M. and Richardson, S. (2005). **Children of the Lucky Country?** South Yarra, Victoria: Macmillan Australia.
- Steffen, W., Sanderson, A., Jäger, J., Tyson, P.D., Moore III, B., Matson, P.A., Richardson, K., Oldfield, F., Schellnhuber, H.-J., Turner II, B.L. and Wasson, R.J. (2004). **Global Change and the Earth System: A Planet Under Pressure**. Heidelberg, Germany: Springer Verlag.
- Stein, R. (2008). Immune systems increasingly on attack. **Washington Post**, 4<sup>th</sup> March, p. A01.
- Tait, P.W. (2008). New vision, new paradigm: health and wealth for all by 2100 - or for no one. **Medical Journal of Australia**, **188** (7), 383-384.
- Trivette, C. (2003). Influence of caregiver responsiveness on the development of young children with or at risk for developmental disabilities. **Bridges**, **1**(13), 1–13.
- Turnbull, A.P. and Turnbull, R. (2003). Begin with the end in mind: Individuals with disabilities and their families living life to the fullest. In B. F. Williams. (Ed.) **Directions in Early Intervention and Assessment**. Spokane, Washington: Spokane Guilds' School and Neuromuscular Center.
- Wilkinson, R.G. (2005). **The Impact of Inequality: How to Make Sick Societies Healthier**. New York: The New Press.
- World Health Organisation (2001). **The International Classification of Functioning, Disability and Health (ICF)**. Geneva, Switzerland: World Health Organisation. <http://www.who.int/classifications/icf/en/>
- World Health Organisation (2002). **Towards a Common Language for Functioning, Disability and Health: The International Classification of Functioning, Disability and Health (ICF)**. Geneva, Switzerland: World Health Organisation. <http://www.who.int/classifications/icf/site/beginners/bg.pdf>

Zeanah, P., Nagle, G., Stafford, B., Rice, T. and Farrer, J. (2004). Addressing Social-Emotional Development and Infant Mental Health in Early Childhood Systems: Executive Summary. In N. Halfon, T. Rice and M. Inkelas Eds). **Building State Early Childhood Comprehensive Systems Series, No 12**. California, Los Angeles: National Center for Infant and Early Childhood Health Policy, UCLA Center for Healthier Children, Families and Communities.

Zubrick, S.R., Silburn, S.R. and Prior, M. (2005). Resources and context support child development: implications for children and society. In S. Richardson and M. Prior (Eds.). **No Time to Lose: The Wellbeing of Australia's Children**. Melbourne, Victoria: Melbourne University Press.

### **CONTACT DETAILS**

**Dr. Tim Moore**

*Senior Research Fellow*

Centre for Community Child Health,  
Murdoch Childrens Research Institute,  
Royal Children's Hospital,  
Flemington Road, Parkville, Victoria, Australia 3052

Phone: +61-3-9345 5040

Fax: +61-3-9345 5900

Email: [tim.moore@mcri.edu.au](mailto:tim.moore@mcri.edu.au)

Websites: [www.rch.org.au/ccch](http://www.rch.org.au/ccch)  
[www.ecconnections.com.au](http://www.ecconnections.com.au)