

## The social agenda and early childhood care and education:

### Can we really help create a better world?

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*Cover:*

Sarita Patnaik and Sumitra Bhoi, aged 4 years, in a kindergarten supported by the People's Rural Education Movement (PREM), India.

Photo: Jim Holmes

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## Executive Summary

In describing the social agenda and early childhood education and care, this paper looks at the 'big picture', taking a broad overview and setting the context or background for the factors that influence the provision of early childhood education and care. The author summarises recent pertinent evidence in the literature and outlines why it is important to take note of these findings.

The paper begins by stressing the importance of the early years in shaping the adult personality. The author describes how economy and culture present two overriding contextual features. He goes on to describe the links between fertility rates and childcare policies and how the context of childhood is changing, particularly in the more affluent developed world where early childhood care and education is normally provided by the public sector and services are becoming increasingly integrated.

A review of several widely publicised benefit–cost analyses illustrates how the provision of early childhood services can give a positive return to the community in both economic and social terms. Advances in scientific knowledge of brain development reinforce the crucial learning and development needs of the early years.

The author concludes by listing the main forces and changes affecting the children of today and ten imperatives for policy and leadership. Finally, he lists the criteria required to ensure the best experience possible for every child born in the 21st Century.

## Introduction

*“The child is father of the man”* William Wordsworth (1770–1850)

*“The babies who are born now and in the years to come will be the adults who nurse us in our old age, who manage our industry, who entertain us, who live next door. What kind of adults will they be? Will they be emotionally balanced enough to contribute their talents, or will they be disabled by hidden sensitivities?”*  
Gerhardt (2004)

This monograph takes a broad overview, setting out certain important features connected with or directly influencing the provision of early childhood education and care. In effect, this takes the form of a brief typology of apparent nested and related systems of influence (Bronfenbrenner 1979) and estimates the weight of evidence in broad areas of concern. Case studies and examples give actuality and ‘fine grain’. They help flesh out the reality of the ideas discussed. Inevitably, in a topic as vast as that of childhood (and in part how that is understood and represented), there will be sins of omission and commission. However, this is an attempt to set out the ‘big picture’ and the context of early childhood education and care, to synthesise and summarise relatively recent pertinent studies, and to demonstrate the need to take note of such findings and to comprehend why many students of modern society see childhood as one of the major keys to understanding humankind. Inevitably the subheadings employed cannot be fully discrete. The relationships between human behaviour, established (and sometimes cherished) institutions and the growth and deployment of social capital are complex and often disputed. Different perspectives and ideologies influence these relationships in markedly different ways. Childcare, as with schooling, is something almost all of us have experienced and therefore we can all be expected to have a view on the subject.

Of course, the importance of childhood in general terms has always been understood and has been documented by many authors including Juvenal, Shakespeare, Freud and Spock. Observations by parents, teachers, paediatricians and psychologists also tell us that the imprint of early experience coupled with the genetic legacy seems to build within our minds those needs and emerging dispositions, such that our minds are compelled into avenues which themselves become the ‘highways’ of our personality. These are as individual as a snowflake; yet we become assertive or submissive, responsible or irresponsible, creative or passive, affectionate or indifferent. We carry our early experiences like a large badge that licences us to behave in certain ways as an adult, often entirely predictable and closely aligned with those very personality traits we displayed as a child. Robert Reiner, the American film producer, is reputed to have said “After four your brain is cooked” and, although this is far too deterministic and negates the possibilities of therapy or the well-known re-negotiation of the personality that sometimes takes place in adolescence, it is remarkably ‘pithy’ and apt.

We have more than the individual comment of past poets and thinkers, more than the substance of novels, more than the preoccupations of clerics and teachers. We now have convincing evidence from neuroscience, longitudinal development cohort studies, and population studies that early childhood is the period when the human organism responds to the environment with such malleability that the very architecture of the brain is affected substantially. In fact, the child’s brain is immensely ‘plastic’ and remarkably responsive during the first 3 or 4 years of life, and our identities as teenagers and adults are shaped critically by the influence of our very early relationships with significant others and by the immediate environment we experience as children.

Above all, we have evidence that the young brain thrives best in an atmosphere of love and consistency in a reliable socio-emotional environment; one best characterised as exhibiting security and high quality attachment, where others are available emotionally to provide comfort and support when needed (Gerhardt 2004). Within this complex mix lie the rich possibilities of language, appropriate risk-taking, exploration, initiative and some degree of choice. Equally importantly, we know that impoverished early experiences are debilitating and, if persistent, can critically limit physical and mental wellbeing. Crime and disconnection have roots in the cradle, it appears. Neglect erodes relationships, inhibits learning and creativity, and creates a poor 'seedbed' for sensitive growth. It casts a long misshapen shadow across the developmental profile of children, affecting later vital school and other social learning, eventually blighting adulthood and creating destructive circumstances for others within the social orbit. This is something Gerhardt (2004) refers to as human beings displaying 'active harm'.

As early as the 1930s, Vygotsky (a psychologist with high current credibility and whose views resonate with current perspectives of social constructivism) wrote: "Every function in a child's cultural development appears twice: first on the social level, and later on the individual level: first between people (inter psychologically) and then inside the child (intra psychologically)...All higher functions originate as actual relations between individuals" (Vygotsky 1978).

Even before this, in the 1920s, Mead (1956) said that "all learning is social", and "socially constructed", yet, as he put it (when discussing perception), we look through eyes that are peculiarly our own. One cannot be said to have much of a personality in the desert. One's identity, one's sense of self, depends upon, develops with, models upon and borrows from interaction with salient others. In infancy, as our brain develops and generalised perceptions form and begin to focus and sharpen, feedback becomes ever more crucial.

The paradox is that from the satisfying symbiosis of the early stages of infancy grows the understanding of ourselves as separate, autonomous and unique; and this process depends greatly upon both a close attachment with initial caretakers and a burgeoning exploration with and 'safe' interplay with others. We are literally constructed 'brick by brick' in this process, and fault lines may show permanently if substantial traumas or especially hostile conditions are experienced. We learn our value and our agency from others and the 'best' learning is clearly that which involves our motivation (engagement) and our self-esteem together. We construct our attributions of causality (what works, how things happen, what appears to be reliably predicted and contiguous) from experience and the degrees of consistency we note in others. We learn what is of value in the company of others. In short, humankind is a supremely 'social' animal; dependent and interdependent, the gatherer, the communicator, the copier, the initiator, the creator of cultural change, the reflective thinker.

Much of the foregoing depends upon the affection, concern, minds, ideas and attitudes of others. Our sense of awareness of others and the burgeoning awareness of our own identity are put well by Arnold (2005) who, in her discussion of the 'mirroring' of behaviour, says that an infant "needs to connect with others in order to thrive, develop and experience a sense of self." The opportunities perceived commonly in early childhood education and care are so often those crucial points of learning through play and interaction, when even those carers or teachers most wedded to didactic processes can see how handsomely such motivation and engagement actually works.

"Social interactions catalyse learning. Without this sort of interaction, an individual can neither learn nor properly develop. When confronting a social context an individual's learning improves in relation to the wealth and variety of that context" (OECD/CERI 2007a). It is especially this aspect of learning (and teaching) that needs

more widespread understanding during the later stages of formal education. In this respect, primary and secondary schools can learn much from observing Early Childhood Education and Care (ECEC) pedagogy; a term coined by the Organisation for Economic Co-operation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

## Time, place and action: childhood and the contrasts of fortune

Taking the broadly ecological perspective mentioned above puts the reviewer under the influence of Bronfenbrenner (1979) and his work on the ecology of childhood, as seen through a typology of systems of influence. For any child, this implies that two overriding contextual features – economy and culture – dominate everything. Perceived as the major concerns in the outer ring of a target, where the centre is the child herself, these two interact with every other influence we perceive and bear upon our child as she develops and learns.

Childhood is, of course, a social construct and what societies 'do' with their children and how they describe their versions of the desirable or appropriate attributes of childhood have varied from century to century and culture to culture. However, with the globalisation of economies, the power of commercial exploitation, and the speed and persuasiveness of media contact everywhere come features remarkably akin to homogeneity. Whether we like it or not, there is surprising commonality of experience, if not of focus. For instance, throughout the 30 OECD countries, many of us share the same media experiences and our children are socialised increasingly by powerful agencies outside our control. This is occurring to the extent that, in some cases, embattled parents perceive the media to have more power in the process of upbringing than the parents themselves. There are many cases when the proportion of quality time a child spends with parents is a fraction of that spent with the media.

Certain major research themes emerge from any review of the literature on children. Firstly, and mentioned already, is that in early childhood, learning is at 'flood-tide' and is particularly crucial during the first 3 or 4 years of life. At this stage, learning affects the architecture of the brain and our disposition to think and act, thus building life-long habits of mind. Secondly, attachment and consistency are at the heart of our learning. Experience of warm, loving attention is the best bulwark against dysfunctionality in adulthood.

Each year, something under 10 percent of the world's children are born into a rich OECD country. Despite the diseases of relative affluence, such as diabetes and heart disease (caused largely by under-exercise and too much fatty and sweet food), these children will, with modest luck, live into their late 80s and will normally have the opportunity to study up to and beyond university level. They will sleep in safe, dry, comfortable environments and (usually) be a member of a relatively small focused group or family. They will have access to good clothes and modern technology.

In contrast, the remaining 90 percent are born into poverty, which is sometimes extreme. They suffer poor sanitation and an inadequate diet, and are exposed to serious diseases such as AIDS, malaria, polio and tuberculosis. Many also live under the threat of war, genocide and famine. Such children will, in extreme cases (e.g. Rwanda), have a life expectancy half that of their rich cousins. Their education will be sporadic, tenuous, serendipitous or non-existent.

The 2003 Human Development Report (HDR) (Fukuda-Parr 2003) reports the following events occurring during the 1990s:

- 21 countries experienced a drop in the Human Development Index (HDI) – an unprecedented development reversal that has not been seen before, since the HDI measures human achievements, such as life expectancy and literacy, that are not easily lost along with per capita income
- 54 countries with an average growth rate of below zero for the last decade
- 12 countries with a decline in primary school enrolment rates
- 14 countries with an increase in child mortality
- 37 out of 67 countries with data showed an increase in poverty (measured as the proportion of people living below US\$1 a day).

HDR 2003 also reports there is “nothing inevitable about poverty”, pointing out that China had lifted more than 150 million people out of poverty during the previous decade and South Africa had halved the number of households without access to safe drinking water in just 7 years.

Poverty (relative) is not restricted to the developing world. Substantial proportions of impoverished children and families exist in many OECD countries. For example, around 15 percent of children in England and Australia live in relative poverty (OECD 2001, UNICEF 2005). The ‘within-group’ differences are large, however. Cuba, a relatively impoverished and embargoed country, provides tolerably well for the care and education of a substantial proportion of its children. This provision is possibly more consistent, although not at the material level, than that provided by the generally extremely affluent Australia. In Australia, childcare tends to rely on both state and central government provision mixed with a substantial commitment to private enterprise (care and education are treated as commodities to be bought and sold). Consequently, some of Australia’s poor ‘fall through the net’ and do not receive the support they deserve. This is especially true of Australian aboriginal children, whose conditions are often similar to those in developing countries.

In contrast, Cuba has within its over-arching, official approach, a system of childcare/preschool institutions called ‘Children’s Circles’. These are usually available to children from the age of about 12 months. For those who cannot benefit, or who live in remote rural areas, the educational authorities have a system of trained ‘coaches’. These work within the community, attempting to support and stimulate the family’s approach to child development and learning. They also provide the equivalent of basic health support and advice as well as toy libraries and learning materials. There are no figures available for the proportion of Cuba’s gross domestic product (GDP) spent on such a system and it clearly has its gaps, but it is a basic right of the people and does not depend upon income (UNESCO 2007). Moreover, as in many countries, Cuba has an education ministry that embraces childcare and sees it as an integral part of education, in a similar approach to that taken in countries and states within the OECD (e.g. South Australia, Tasmania and Victoria).

Thus, the broad outer circle of any contextual/ecological representation of pressures on childhood is one that must take into account the relative affluence or material poverty of the culture and how these are dealt with politically. A rich country can display a relative disregard for its youngest and most vulnerable, or may be pressurised by affluent lobby groups to ignore the impact of ‘choice’ on the minority poor in a thriving market economy. On the other hand, a poor country may have ingenious ways of supporting its young and their families and see systems of support as a major political imperative, such that no child is left uncared for or uneducated within the limits of its finance and power. The politics are themselves embedded in complex ideologies and can sometimes provide the key to style and type of commitment. The mainly rich socialist countries of OECD, typically the Nordic countries, view ECEC as a definite part of tax-based public provision, while rich ‘conservative’ countries, typically Canada and Australia, tend to put greater emphasis on family responsibility and free-market approaches.



## Putative links between fertility rates and the establishment of childcare and 'family friendly' policies

Birth rate figures from 2006 show that, within the OECD (with the exception of the USA), all countries have a birth rate that is either falling or apparently stable but below a replacement level of approximately 2.2. In the UK, the Total Fertility Rate (TFR) was 1.79 children per woman; a slight increase from 2001, when it was 1.6. This is higher than the European Union (EU) average of about 1.46, but lower than France at 1.92 and Ireland at 1.99. Commonly in OECD countries, average age of first parturition is 29.9 and one should bear in mind that the TFR is sensitive to the timing of birth. "If women postpone childbearing to some later time in their life, then the total fertility rate drops almost irrespective of changes in family policies or employment" (Neyer 2006).

Paid maternity leave as a statutory right exists in all OECD countries except Australia and USA, although states and employers in both these countries have their own arrangements, some of which are quite generous. Family-friendly policies vary in style and apparent effectiveness and are difficult to tease out and separate, since they commonly cover areas of administration in employment, welfare, health, education and childcare. Increasingly, however (as mentioned above), education and childcare are becoming fused or dealt with under the aegis of the same ministerial portfolio (as occurred in nine OECD countries in 2006). "In the Nordic countries, childcare is part of [a combined and interlinked group of] policies that are meant to ensure women's labour-force participation...[education policy]...and citizens' [including children's] social rights" (Neyer 2006). OECD (2001) adds: "The increasing precariousness of employment among males and the growing instability of marriage also encouraged women to participate in the labour market to ensure economic stability for their households. As a result, more women – and also more men – are facing dual and also conflicting employment and family responsibilities. In Finland, for example, over 60 percent of women with a 3-year-old child are employed (compared with 70 percent of all women aged 25–34), while in Australia, only 47 percent of women with a child under 3 work (compared with 64 percent of all women aged 25–34)."

In Western countries, childcare provision is *thought* to have a powerful influence on women's reasoning about children and family size. Demographic trends suggest that cheap and effective contraception, available in many countries since the early 1960s, affected choices quite markedly. There are mixed messages, however. France and Russia provide cash incentives and are 'avowedly pro-natal', with emphasis on better health support and, in the case of France, relatively generous paid maternity leave. In common with the other Nordic countries, Sweden stresses gender equality and includes its childcare as part of the total women's rights package. "How successful cash is as an incentive (when paid to the parent) is still unclear. One study suggests that, even when cash allowances are boosted by 25 percent, the fertility rate climbs just marginally" (BBC 2006). Norway's total welfare model is said to have an impact on the birth rate. Here, paid maternity leave at some 80 percent of salary is combined with free or means-tested daycare for children and job-return guarantees for up to 3 years. Fathers too are actively encouraged to take time off to be with their children. Yet the TFR is 'struggling' to reach 1.9 and Sweden, with a very similar 'total package' of policies, has a lower and apparently static TFR of 1.75 (Neyer 2006).

Broadly speaking in affluent countries, more jobs for women *seems* to equal more babies. New Economist (2006) suggests "Countries with high female labour participation rates have higher fertility rates...It seems that if higher female participation is supported by the right policies, it need not reduce fertility. To make full use of their national pools of female talent, governments need to remove obstacles that make it hard for women to combine work with having children. This means offering parental leave and childcare." Childcare (including after-school care) is clearly a major plank in EU policies towards women working and attempts to raise the

TFR, but there is a tendency for member states to ally themselves to ‘conservative economic principles’ i.e. to “decentralize, marketize and privatize childcare services...Such policies enlarge social and economic cleavages in accessibility, affordability, and quality of childcare among different groups of women and contribute to an increase in the gender division of work” (Neyer 2006). The degree to which the importance of ECEC and its accompanying ‘family-friendly’ policies are kept before the public eye appear to matter, but it is the combined and clear raft of provisions that seems to count. Overall, it would seem that childcare is a vital component of dealing with poverty and what is broadly termed ‘welfare to work’, i.e. the provision of systems assisting mothers to access the work force. Family and educational policies that signal official perceptions of the importance of the family, but are also clearly geared towards helping women find or stay in employment, help to alleviate poverty and ensure gender equality. The Nordic countries may be considered good examples in this respect.

## Families and change

Certain commonalities of family life can be observed readily throughout the modern world. Birth, copulation and death are the prime markers of our lives, as indeed they have always been. These still normally have important rituals attached to them that mark out both our aspirations and our vulnerability as mortal beings. Values, ideologies and religions still fundamentally affect our family belief systems, our attitudes and our lives. Even in an increasingly secular and non-committed society like that in the UK, there are crucial times when both the state and the individual rally to the comforting rites of religion.

Increasingly, however, our children are socialised by the all-pervasive media. In some cases, the media appear to have more power in this process than parents, caretakers or religious beliefs. Immediately adjacent to the media lies the commercial world and its often seductive vulgarity in communicating what is desirable in our common culture. Trends are invented, made and sold to us and our children with remarkable frequency, altering the emphases of culture and family with speed and skill. No child escapes, even in the most impoverished nations, and the combination of media-plus-peers is recognised by sociologists as a heady mix of socialising pressures, even if the relative weight assigned to them is a matter of debate. The Dunedin Multidisciplinary Health and Development Study (Silva and Stanton 1996), a longitudinal study conducted by the University of Otago, New Zealand, has followed a group of children born in Dunedin in 1972/3. The results indicated that that children who watch a lot of television were much more prone to attention problems and inability to concentrate when teenagers. Even when other factors like socio-economic status (SES) and intelligence were statistically evened out, the evidence was clear and convincing. “This latest study adds to the growing body of evidence that suggests parents should take steps to limit the amount of TV their children watch” (Hancox 2007).

It is clear then, that the economy and culture affect the family and each citizen’s personal intentions. The context of childhood is changing. We can also see that, in an affluent world (such as that associated with the OECD countries), children have become a lesser ‘commodity’. The TFR has fallen steadily since the 1960s and remains for the most part below replacement levels. In Western countries, almost half a female’s potential fecundate life (age 12–30 years) is statistically barren. This means, in effect, not only a reduced birth rate, but also a changed family in both structure and function; referred to by Giddens (1999) as the “changed family in a post-natural world”. One can realistically think of every other child in the EU as potentially having no siblings and being an ‘only, lonely child’. Moreover, she exists in a family where both parents work. Such change has many interrelated causes. The impact of the contraceptive pill has given women more power over their own bodies and changed the nature of planned parenthood. Other causes include the effects of a

more globalised economy, cheaper accessible technologies, greater stock market uniformity and heightened ease of mobility.

In short, in a world of globalisation, mobility and high mortgages, encouraged (and sometimes fuelled) by the communication media, many women feel the financial imperative to return to work as soon as possible after the birth of a child in order to help secure the family's finances. With both parents at work, many children have to be involved in systems of care. This includes family daycare, being looked after by a friend or relation, or being placed in a formal childcare institution with qualified carers and teachers.

The long march of women has had a major part to play in the whole equation. The slow movement towards social justice and equality among the sexes (sometimes, from a UK perspective, this seems too slow) moves us inexorably to the position where women make the sorts of choices that were largely denied to them in the past. These choices, which are still denied in some cultures, include making decisions about marriage, family and work. In Australia, for instance, the percentage of women who never marry tripled between 1976 and 1998 and is approaching 25% (ABS 2005). The same source cites 15 percent of families as single parent and 26.6 percent of children are born to unmarried mothers. Moreover, there is a trend, not quite so marked as that in Sweden and Finland, towards 'de facto' marriages and an obvious re-negotiation of the meaning of the contract. It was estimated that in Australia by 2010, almost a quarter of women aged 35 would be single (ABS 2001). The UK shows a similar trend, with many women making a deliberate choice to remain single (McDonald and Kippen 2000). In short, and in Western society at large, marriage is no longer the main avenue to female success and happiness, despite the biological imperatives of childbearing. The position of women is getting closer, therefore, to that traditionally associated with that of men.

Families living in developed countries during the 21st Century are quite different from those of a hundred years ago. In the early 1900s, there was relatively high employment among men; families of six children were quite common and 13 or 14 not infrequent. Women rarely worked outside the home once married (unless they were poor). The division of roles and labour was regarded by many as ordained by God, although things began to change with the emancipation of women and accelerated during the 1914–1918 war. The vast majority of children in Europe, North America and Australia went to school, if they were lucky, up to age 12 years or so. At that time in Europe, girls reached menarche at approximately 16 years and boys commonly worked as men from about 14 years of age. A significant number of children died from tuberculosis, diphtheria and poliomyelitis during their early years, while influenza was a serious hazard for all. Hard, physical labour was considered a normal experience for most men and women, both in the home and outside; and accidents at work and in the home were not uncommon. Radio communication and electricity had not long been invented and the automobile was the province of the rich and eccentric. Railways were, however, relatively cheap and used widely, but mobility on any scale was clearly the province of the seriously rich and large-scale migration of rural communities to the growing cities was still in its infancy.

One could continue with the litany of conditions and values, of inventions and social circumstances that have changed in OECD countries and (to some extent) elsewhere. The change from button to zip, the manufacture of jeans and the creation of man-made fibres have occurred largely within the last half-century or so and have changed the nature of adult's and especially children's clothes. Fast food, global crop markets, supermarket control of farming and the growth of packaging have changed lives within a generation or two. The cobbler working in leather repairs is rare in an age of factory-produced footwear and, in technologically advanced societies, individual transport (the motor car) is almost every person's normal expectation. Compared with their forefathers, few EU children walk to school or walk much at all, and the density of road traffic makes for fearful

cycling. These are just a few pointers to remind us that the context of childhood and the routines of family life are very different from those of a century ago.

Within this broad category of families and change comes increased rates of divorce and the changing nature of family structures and functions. Divorce rates run at some 40 percent plus in Australia, Canada and the UK (Giddens 1999). Thus many families are remade or restructured at certain times and the art (or diplomacy) of step-parenting becomes crucial to the happiness and welfare of many children. Adversarial litigation becomes increasingly anachronistic in modern, high-divorce societies, and there is a clear need for parenting support and a better understanding of conflict resolution. Here, ECEC plays a fundamental role helping support revised family structures (working parents, patterns of shift work, economic needs, re-made families) and quickly becoming an essential part of normal modern society. Moreover, as Handy (1994) maintained over a decade ago, it would appear that the economic map of the world is not affected 'merely' by globalisation of the economy and the power of multi-national corporations. It is also being affected by women's job opportunities and, in some cases, by women's greater reliability or availability to certain professions, like paediatrics and school teaching. Throughout the world, women are accessing the work force in significant numbers. In fact there is some evidence to show that more women than men are likely to have jobs in the more traditional and now defunct heavy industrial areas of northern England, although not all will be full-time and the cost to employers will be less than that of employing men.

We should note that almost all measures of human growth and development (and possibly of more nebulous concepts, like those of dispositions and wellbeing) can usually be plotted as gradients showing a rectilinear relationship to socio-economic development and fluctuation. Income and cognitive performance usually show a strong relationship in many measures taken internationally, and there have been suggestions in the literature that there is a relationship between breast feeding and later school achievement. Lower than average income clearly correlates with chronic illness. Indeed, one could assert with reasonable surety that much chronic disease appears to be 'set' by the material conditions experienced during early childhood, while longevity itself increases with wealth. The increase in female deaths from lung cancer in Europe directly parallels female uptake into the work force during the past 40 years. Of course it also parallels the growth in cigarette smoking among the female population. However, whatever the dangers of thrombosis (and perhaps of cancer) associated with the introduction of the female contraceptive pill (probably the single most important factor linking choice and lifestyle for women), pregnancy is still likely to be somewhat more dangerous for the mother.

In affluent societies there are large numbers of elderly. Older people may need to be cared for by what may become (with a lowering TFR) a decreasing number of taxpayers, i.e. a declining financial and resource base. One can only speculate on the impact of a low birth rate on a burgeoning power like China, where there is likely to be a huge increase in the number of elderly later this century. This potential problem may be alleviated by raising the age at which people are normally permitted to retire; a relatively recent, but common political stratagem in countries like the UK or Australia. Such an approach may be no bad thing either, since it recognises greater longevity and fitness for purpose among the moderately elderly. There are also the apparent side effects of an increased sense of wellbeing and status among those participating, older members of society.

Thus, the issues associated with families and children are many and complex. What matters is that families have altered and it is the *function* rather than the traditional structure on which we need to focus. How children are best loved and socialised in a secure environment becomes a keen political issue. There will be families of all sorts and childcare institutions need to be attuned to support community involvement in a way that takes this into account without stigma or prejudice. Grandparents and older people may become substantially

more involved in primary childcare. Divorce and separation seem inevitable, almost a part of adult choice in our mobile, longer living, modern 'post-natural' societies. Family change has to be viewed much more constructively, both for the sake of the children and for the mental health of the adults involved.

Thus, despite slightly different work-patterns in different countries, 'institutional' or organised childcare has become an important and perhaps normal feature in everyday family life. However, a particularly large-scale study in selected US states showed that if childcare is poor during the early months of life (up to 9 months), negative effects can be visible at 3 years (NICHD 2000). This study also demonstrated that the effects of inadequate parenting and poor family functioning are clearly offset if the childcare is of high quality. A Canadian focus paper adds: "The message is twofold. First, quality of childcare matters to virtually all child outcomes and no matter what the child's situation or background. Second, good quality early childhood programs together with parental care at home is better than parental care on its own" (CRRU 2003).

## ECEC: rationale, economy and policy

Is it worthwhile spending money on ECEC? Many families in countries such as Australia, the UK and USA might well reply 'no'. This is because, where there are forms of private provision, some of these can prove so costly as to completely negate the effect of one of the adult's earnings. This is a not infrequent position in areas of rural deprivation or low wages, or where there is only unskilled work available. Other pertinent questions may be asked, most usually by policymakers and politicians. These are: What are the benefits to this or that community of putting in expensive infrastructure, buildings and qualified staff? What working life will the centre have, and what are the demographic risks (e.g. an ageing population may make the centre obsolete)? Even wider questions are: Is there a clear relationship between the economic performance of a country and its education system, including ECEC? What are the overall benefits?

Such questions immediately raise the issue of putative personal and social costs. The long-term benefits of an adaptable, pro-active and pro-development set of education and care policies appear to have a major impact, not only on the overall economy of the country, but also on the social advantages of greater social unity and cohesion, more obvious pools of talent, better technical training and the amelioration of poverty. Good ECEC has been shown to improve life chances as well as academic achievement in school. Providing ECEC and thus assisting women to gain employment ('welfare to work') has been shown to help alleviate poverty in the UK (Bertram and Pascal 2003; Sylva et al. 2004). With such opportunities come greater personal pride and security, a clear reduction in minor acts of delinquent and anti-social behaviour, and creation of greater community wellbeing. The contiguity of relationships between care, education and resultant advantageous social and psychological capital are clear and well demonstrated in the literature.

The politics are relatively simple, but far-reaching. Broadly speaking, they cluster around five inter-related issues:

- Intention to ensure that all children have confirming experiences to start them off in life and endow them with 'reasonable' autonomy, connectedness and concern for others (a list remarkably similar to that of the Finnish principles for ECEC, see STAKES [2004]). This is sometimes referred to as 'universality' of opportunity. It is about the here and now and 'being, as well as becoming'.
- Interventions into poverty and high need, i.e. targeting provision and tailoring it sensitively to meet special needs, such as those of the immigrant, the dispossessed, the intellectually gifted or the disadvantaged.

- Ensuring gender equality so women have the same career choices and same responsibility options as men.
- A clear awareness that early brain development benefits from conditions of attachment, stimulation, consistency and being 'bathed' in meaningful language and aesthetic possibilities.
- Awareness that investment in our children pays handsome dividends in the future, with less delinquency and criminality and with greater societal 'wellbeing' as a likely outcome.

The point about 'being' as well as 'becoming' is made frequently by professionals, who regard the child as having rights to happiness and to the unscripted and psychologically vital opportunity for play and just 'mucking about', rather than being made to settle to a narrow curriculum too early, or to a programme designed for academic outcomes and full engagement at the expense of serendipity, excitement, wellbeing and a passion for learning. It would not be unfair to say that politicians and those looking for justifications of expenditure on the provision of ECEC may sometimes ignore such a point. Some see the opportunity for social justice and for judicious social engineering as too tempting and likely to override such issues. Moreover, 'uniformity' and fairness of provision have become more important markers in politics than they may be in reality. Equality of opportunity may not be quite the same as equality of treatment. There may be a need to strike a balance between uniformity of provision and individual creativity or human difference. We are usually comfortable with such a notion when it comes to support for the disadvantaged, but are less so regarding giftedness or focused and specific motivation. This is where the judgement of the professionally trained observer becomes very important and should not be overridden by bureaucratic agreement or legislation.

Policies, therefore, have tended to put increasing focus on the establishment of ECEC as a public good, an investment and a definite advantage to subsequent schooling and long-term social capital. As pointed out earlier, this has not prevented private ventures into the provision of ECEC. Many countries (including Australia, New Zealand and the USA) have established avenues of private provision. They justify this on the grounds that ECEC is a commodity to be bought and sold on the open market and thus has the same ethical and political battleground as other stages of education. Some parents prefer to pay for specific religious beliefs, some for types of education and care (e.g. Steiner or Montessori), some for 'the right peers and social climate'. Yet others, particularly the Nordic countries, point to good early childhood experience as a special ethos, a form of social 'glue' in a well-functioning democracy, a state need; not something to be regarded simply as a privilege or commodity. Be that as it may, political perspectives vary from those on the 'right', who tend to see it as a 'purchase and choice' approach, to those on the 'left', who see it as a way of producing a more equitable and balanced society.

Whatever their political persuasion, many countries are beginning to examine not only provision and coverage for those under formal school age, but also the nature of the services, their efficiency and collaboration. In short, the joined-up nature of services for the young child and her family are central to many policy discussions. These discussions are usually about integrated provision and the building of social capital. In themselves, these are not new ideas. They have a long history and many variations going back to at least the early 19th Century to New Lanarkshire and the ideas of Robert Owen, the social philosopher and philanthropist, and to the attempts he made to establish homes, healthy conditions and schools for workers' families.

Over the years, there have been sporadic attempts to provide integrated services for children of school age and below. These have meant different things and involved different features and components for different audiences. Location of kindergartens and primary schools on the same site has been fairly common in a number of countries. 'Area', all-age schools, sometimes including playgroups or kindergartens, can be found in rural Australia, Canada, Finland and the USA. Additions to school services (visiting nurse, dentist or general

practitioner) have been common in all OECD countries at some time or another. Almost any mix can be found and has been tried. However, when talking of policies of integration, most policymakers today refer to ways in which genuine partnerships with parents and the local community can be established, maintained and fully committed. This means that crèche and childcare, occasional care and after-school-hours care, modest health service provision and counselling/advice, kindergarten (pre-school) and lower primary school can all operate together. This is the 'one stop shop' or 'wrap-around provision', the integrated service, designed to be available to families in a single location. Such institutions have many and varied rationales, from ease of transitions for children to ease of pick-up and involvement by parents and children; from tailored specialist, targeted intervention for children with disabilities or special needs, to universal, multi-disciplinary provision. These centres are staffed by multi-professional teams where each specialist, from speech therapist to social worker, is able to see, identify and support the child in her total context as she develops and learns.

Reports of studies such as *Starting Strong* (OECD 2001, 2006) leave little doubt that many countries are moving increasingly in a concerted direction towards integration of family and early childhood services. The possibilities have considerable support (and relatively little detractor) in the literature. Institutionalised childcare is seen increasingly as a mainstream part of education. Countries like New Zealand have striven to upgrade and stabilise the childcare 'industry', moving towards an all-graduate profession that discourages staff turnover and offers attractive options for professional advancement to those who may have simply 'dipped in and out' of childcare in the past en route to a more lasting career. The Start Right Committee in the UK (Ball 1994) was concerned especially with ways of 'scaffolding' a profession for those involved with the very young.

Seeing the education and care of the 3-year-old as 'seamless' and a part of the larger provision for those from birth to 8 years or so, has been a major concern of OECD's two studies (2001, 2006). Both UNESCO and OECD are using the term ECEC, since only this is broad enough to encapsulate fully the complexity of the many different systems of care, crèche, kindergarten and preschool, while at the same time paying proper regard to the work of neuroscience and developmental psychology. Good quality ECEC seems to provide many opportunities for both the child and the family. When integrated appropriately with other support services and embedded fully in the community, it seems to help create a better social atmosphere and greater community security and regard. It certainly seems to pay in terms of money invested (see Ball 1994; Bertram et al. 2002; Lynch 2004; Karoly et al. 1998; Karoly et al. 2005).

However, there are drawbacks. One of these may be the tendency for state (i.e. public) systems of ECEC provision to demand accountability in ways they and the public can best understand. This is often couched in terms of desired (measurable) outcomes from the children. Thus, there is a tendency for what the Swedes call the 'schoolification' of ECEC, such that children are likely to be pressed into a narrow, school-like curriculum at ever younger and totally inappropriate ages. In short, the children's performance is seen in school-like terms and through a sufficiently developmental perspective of individual social and creative growth and learning (Lally 2007). On the other hand, many professionals are aware of the dangers and aridity of such 'school' approaches and do their best to see that ECEC is warm and homelike (the latter is much valued in the Nordic countries), that it epitomises love, culturally and developmentally appropriate sensitivity, and opportunities for cognitive stimulation and problem solving.

Governments throughout the 30 OECD member states offer somewhat different rationales for their increasing investment in ECEC. OECD (2001) gave five very common and interrelated objectives presented as:

- Facilitating the labour market participation of mothers with young children and the reconciliation of work and family responsibilities

- Supporting children and families 'at risk' while promoting equal opportunities to education and life-long learning
- Supporting environments that foster children's overall development and wellbeing
- Enhancing school readiness and children's later educational outcomes
- Maintaining social integration and cohesion.

Additionally, many countries see ECEC as an essential precursor to primary or grade school. Consequently, the nature of the collective experience starts ever younger and a formal 'curriculum' becomes more likely. There are wide variations in nomenclature and understanding, with some countries classifying all ECEC before age 6–7 years as primarily childcare (Nordic countries especially).

However, others perceive primary school as best starting semi-formally at age 4. Terms like 'kindergarten', 'preschool' and 'nursery education' become almost meaningless and this is one of the reasons why OECD and UNESCO prefer to use the term ECEC, assuming it spans the years from birth to age 8, although there is little clear rationale for the age 8 assumption. Moreover, many systems have not clarified the amount of provision thought desirable, such that some see kindergarten as a maximum of four half-days per week (e.g. South Australia) while others see a week of 60 hours as an essential option. The benefit accruing from full- as opposed to part-time provision is itself insufficiently researched and understood.

Many countries are therefore examining the actual amount, timing and quality of their early childhood provision and connecting it more clearly with variations in later school achievement and overall social and human capital. These last are notoriously difficult to define (see Temple 2000), but as noted above, the amount, stage and provision of ECEC varies from country to country and it is difficult to disaggregate care from education and from notions of social capital. The Finns have a substantial educational project on 'learning to learn' (across the age ranges) and point to the fact that learning to learn appears as much embedded in socio-emotional constructs as in cognitive ones (Niemi 2007). Thus one can expect that 'capital' is as much embedded in learning to trust one's autonomy or agency as it is in literacy. Not only do terms for provision vary, but also differences in emphasis (and career and salary) will be allied to different traditions and different levels of training. The traditional divide between carer and kindergarten or pre-school teacher is breaking down quite rapidly. This was one emphasis in the Start Right project (Ball 1994) and formed part of the Labour Party's approach to ECEC, concerning the need to 'scaffold' a lasting, professional career for carers and to link their training more thoroughly with that of teachers and other professionals.

The widespread credence given to McCain and Mustard (1999) and the reviews of Karoly et al. (1998) and Karoly et al. (2005), although clearly preceded by Ball (1994) and Weikart's study of Ypsilanti children enrolled in the High Scope Study (Schweinhart 2005), have helped galvanise policymakers in many Western countries. These shifts in policy have been mirrored by similar shifts in ministerial responsibility. "England (1998) and Sweden (in 1996) transferred national responsibility for ECEC (early years services and childcare for school-age children, school-age childcare services) from welfare to education departments" (UNESCO 2002). South Australia has almost two decades of assigning responsibility for education and childcare to the Ministry for Education and Children's Services. It is now common in many countries (including three states in Australia), to see a growing view that children's early care and education is indivisible and should be the shared responsibility of both the state and the family (OECD 2001). Many studies show that investment in children's learning and support from birth is cost-effective and gives better value for money than attempting to remedy problems later (O'Brien 1990; Ball 1994; Karoly et al. 1998; Karoly et al. 2005; Bertram and Pascal 2003).



## Benefit–cost analyses

Several widely publicised reports from the USA have examined the provision of early childhood services in terms of putative return to the community. Karoly et al. (1998) and Karoly et al. (2005) (for the Rand Corporation), and a thorough study financed by Pittsburgh National Corporation Financial Services Group (PNC 2005), conducted cost–benefit analyses for seven of the 20 interventions examined.

“One of the seven individual programs evaluated (the Comprehensive Child Development Program or CCDP) was not shown to be effective, so it could not generate net economic benefits. A second program (the Infant Health and Development Program or IHDP) had favourable effects as of the last follow-up at age eight, but the outcomes assessed could not be translated into dollar savings. For the remaining studies (including the meta-analyses) the estimates of net benefits per child served range from about [US]\$1,400 per child to nearly \$240,000 per child...Viewed another way, the returns to society for each dollar invested extend from \$1.26 to \$17.07. Positive net benefits were found for programs that required a large investment (over \$40,000 per child), as well as those that cost considerably less (under \$2,000 per child).” (Karoly et al. 2005.)

Weikart’s (1994) High Scope, Ypsilanti Perry Preschool Study is symbolically and practically important throughout the world. This now has data for children from age 3 years through to age 40 (see Schweinhart 2005). Data from the early part of the study (to approximately 1993) were of considerable importance in influencing the debate over early childhood provision within the British Labour Party and within the Start Right project (Ball 1994, Sylva 1999). The study has also influenced many contemporary discussions on ECEC.

Strictly speaking, cost–benefit analysis requires costs and benefits to be expressed monetarily; however, many evaluations of ECEC are expressed only partially in these terms. Many include what we would prefer to term ‘putative’ cost savings, i.e. an estimate of effectiveness in terms of increased social capital in addition to potential cash savings. Some of these aspects of putative savings might well be disputed.

Other evaluations well known outside the USA include PricewaterhouseCoopers (2004); Lynch (2004, 2007); Bertram and Pascal (2003). Lynch was commissioned by the Economic Policy Institute in the USA (a non-partisan ‘think-tank’) to examine the possible benefits of investment in high-quality, large-scale provision of early childhood services. These services were a mixture of care, education, health and family support. Four programmes for which there were reliable, longitudinal data were studied and Lynch (2004) noted that: “ECD programs easily pay for themselves over time by generating a very high rate of return for participants, public and the government. Good programs produce US\$3 or more in benefits for every dollar of investment. While participants and their families get part of the total benefits, the benefits to the rest of the public and Government are larger and, on their own, tend to far outweigh the costs of these programs.”

More recently, Lynch has shown (in respect of children in centres in the Chicago area) that simply comparing government budgets with costs, and even when leaving aside the benefits of lower crime rates and improved individual circumstances, targeted programmes pay for themselves within nine years and universal programmes well within 17 (Lynch 2007).

Bertram et al. (2002) evaluated the Early Excellence pilot programme (provision of integrated ECEC services) based in 29 schools in England. Like Lynch, but using a largely case-study, qualitative approach, the study clearly demonstrated that the returns to the community were considerable. As well as identifying reduced stress among the families surveyed, there were several benefits to the children:

- Enhanced social and emotional competence
- Enhanced cognitive development, particularly in language skills
- Early remediation of special needs and improved rates of inclusion in mainstream settings
- A reduction in the rates of child protection orders and 'looked after' children
- Improved physical wellbeing.

PricewaterhouseCoopers (2004), commissioned by the Daycare Trust and the Social Market Foundation, found "The baseline estimate of incremental annual economic benefits is around 1.5% of GDP in 2020 (or around £18 billion at 2004/5 GDP values), but the sensitivity analysis shows that this is subject to significant uncertainty. To avoid spurious precision, it would therefore be more reasonable to conclude that our estimates suggest annual economic benefits of the order of around 1–2% of GDP (or around £12–24 billion at 2004/5 values)." The study adds "It should also be stressed again that all these economic benefit estimates exclude the potentially important social benefits (e.g. reduce child poverty and income inequality) that could flow from implementing the early years vision for 2020."

The same study also describes in some detail the importance of looking at the additional social advantages of helping the government to eliminate child poverty by 2020 (the point at which it is estimated that well over 3,000 integrated children's centres will be available to all in the UK). In addition, it quotes the Effective Provision of Pre-school Education (EPPE) study (Sylva et al. 2004), which suggests that high quality affordable education and care can clearly boost children's readiness for school and ability to benefit from it. The study examines the ways in which the costs might be borne (in part) by families, noting that it is generally agreed that some costs would have to be derived from parental contributions and that the private funding initiative (PFI) does have its place in a mixed economy approach to ECEC. Whether provision costs can be as generous (fair) as the usually 'means-tested, yet absolute' cap and thus, for parents, very affordable approach of the Nordic countries is a matter of conjecture and, ultimately, of ideology. The authors point out that anything like the Swedish model (where costs are capped at around 16 percent of total for the first child and fall to 5 percent for a third child) would offer significant savings to all families at 2005 rates in the UK, but would effectively provide a tax-payer subsidy to better-off parents. The New Zealand subsidy system (paid to providers, not carers) is also discussed. PricewaterhouseCoopers (2004) notes that the New Zealand subsidy is not provided for what would be (in UK) the top third of income earners. They regard this as a fairer system than that adopted in Sweden.

In a detailed and well-documented argument, PricewaterhouseCoopers (2004) concludes: "We estimate that the total cost of the package to government and parents would be in the order of 2.6 percent of GDP in 2020" (around 1.8 percent more than current spending levels in 2004). "The cost of the package is comparable to current spending levels in Sweden and Denmark." The study also points out that, in reality, the benefits to the UK's finances would make the net costs considerably lower, at about 1 percent of GDP, but "The potential benefits from additional early years' investment will only be achieved if providers are funded on a stable and sustainable basis. We consider that this requires the bulk of government funding to be in the form of direct grants to providers, as in countries such as Sweden and Denmark. We also see attractions in the proposed New Zealand funding regime, which links the grant per child-hour to factors such as child:staff ratios and staff qualification levels." (The New Zealand policymakers see this as a way of improving quality and ensuring greater stability in the profession itself.) (PricewaterhouseCoopers 2004)

A considerable number of studies show the economic and social benefits of high quality early years provision. There is plenty of evidence to show it 'works' and is of the utmost importance in our post-modern societies (OECD 2001, 2006). Very few research studies show a nil return and, when putative social/emotional and possible

recidivist aspects of later years are seen as contiguous and close, it is obvious that societies need to find ways to enhance or extend appropriate provision for all. Targeted groups who need particular support show especial gains from early intervention, but all levels yield good returns.

The cost–benefit case could be regarded therefore as modestly secure. The North Carolina Abecadarian Early Childhood Project is a good example and is examined critically by Lynch (2004). The project began during the 1970s in Chapel Hill, North Carolina, and was set up for the benefit of children living in poverty and troubled circumstances. Detailed monitoring and follow-up studies provide the following findings:

- Children within the project were likely to earn an average of US\$ 143,000 more during their lifetime than those not in the project.
- Mothers who enrolled their children in the project benefited by an average of US\$133,000 more than those outside the project.
- School districts where the project was adopted were likely to save more than US\$ 11,000 per child by having to provide fewer places for remediation.
- Participating children's maths and literacy scores were higher than average and their mothers did better in job placements and higher education than those who did not participate.

The explicit message is that children from impoverished backgrounds benefit particularly from carefully designed, consistent attention and intervention. They are known to be at risk of school failure and often struggle with disrupted study, frequent mobility and lack of opportunity. They also tend to have a much more limited vocabulary, with estimates from the USA suggesting that such children will have spoken an estimated 32 million fewer words by the time they are 4 years old than children living in professional families (National Center for Family Literacy 2006).

Numerous longitudinal birth-to-adult cohort studies show the debilitating effects of poverty in areas such as diet, health, education and criminal activity (Shonkoff and Phillips 2000). Poverty, especially among children, is the great obscenity of the current age; an age in which the world has sufficient knowledge and money to ensure no child starves or wants for potable water. Many research studies also show that low SES children tend to perform at a lower level than others throughout their schooling (e.g. Silva and Stanton 1996), and many interventions have been designed to supplement or assist children from such backgrounds in building their intellectual and personal/social resources to help them perform better. Poverty is particularly marked in indigenous communities (e.g. those in Africa, Asia, Australia, Canada and Latin America). However, few technologically advanced countries escape it entirely.

In 1964 the Head Start programme ([www.ilheadstart.org](http://www.ilheadstart.org)) began in the USA. The intervention, which targets health, welfare, education and skills training, is attributed to the insight of Claudia 'Lady Bird' Johnson, wife of former President Lyndon Johnson. It is directed at poverty in largely ethnic minorities in a multitude of tailored state guises and has presented a positive example for many other interventions around the world. In 2005, the programme was enrolling more than 800,000 low-income children per year. Researchers and evaluators have noted strong, positive benefits in terms of language development and schooling generally. The effects are said to continue for at least 20 years and the debate about whether early intervention actually works has been silenced effectively by the weight of the Head Start evidence. However, it remains questionable whether any intervention, however successful, can totally ameliorate the debilitating impact of early misery and deprivation.

In the UK, Wincot (2004) summed up the position very clearly in a briefing report to the UK Economic Research Council. The report came to the conclusion that, in general terms and after a detailed examination of the

evidence nationally and cross-culturally, the importance of ECEC provision was clearly demonstrated as worthwhile. The report concluded:

- Patterns throughout life are influenced heavily by experiences in early childhood according to compelling evidence from a wide range of disciplines.
- Irrespective of socio-economic background, high quality early years education and childcare raises cognitive and social/behavioural outcomes and ability to learn.
- Propensity to engage in criminal activity can be significantly reduced by forms of early years provision.
- Health outcomes (heart disease, depression) into middle age and beyond are heavily influenced by wellbeing in infancy.
- Patterns of physical activity in early childhood become ingrained for life.
- Early problems, if not addressed, tend to become entrenched and bring about long-term damage and disadvantage. Conversely, getting the early years right can help tackle inequalities in health, education and economic prospects.

## The young child and development of the brain

While it is dangerous to be too deterministic and equally unwise to forget the large genetic component of our makeup, we know from studies undertaken over the past 20 years or so that early childhood is a period of devastating power and prediction for human development. It therefore needs careful attention.

Magnetic resonance imagery (MRI) has made a major contribution to our knowledge of the brain and how it develops. MRI can measure blood flow and highlight brain activity while someone is performing tasks, resting, or undergoing a life-threatening situation. The technique is a valuable diagnostic and learning tool and has provided useful information on how the brain develops during adverse and optimal circumstances.

However, views on the importance of certain aspects of brain research and what it actually means for parents, carers and teachers of the very young remain somewhat contradictory. For instance, McCain and Mustard (1999), which remains an influential report, refers to “critical periods” for learning, although the assumptions about such windows of opportunity are very difficult to replicate and confirm or deny. While there is some evidence of critical periods in the development of animals other than humans, for instance that of vision in domestic kittens, it is difficult to apply these findings to children. Hence it is important to note and contrast the remarks of two very respected researchers: Wynder and Bailey.

Wynder (1998) states: “It is the consensus of the participants that a critical period exists during which the synapses of the dendrites are most ready for appropriate stimulation, be it through words, music, love, touch or caring. If these synapses are not so stimulated early, they may never develop.” However, Bailey (2002) suggests: “the importance of timing lies not within a set of age parameters, but rather in the match between experiences provided, the child’s developmental status, and the child’s need or readiness to learn a particular skill or concept.”

We do know that the brain is immensely responsive and malleable during the first 3 or 4 years of a child’s life. Brain cells are built during the foetal stage and, after birth, some trillions of connections are gradually established. These form the structures and stored cumulative experiences (constructs or maps) that govern the storage, coordination, sorting and transmission of information. The constant change in the networks and their burgeoning sophistication is the direct result of contact, observation and experience, added to repetition

and curiosity; and this last seems to be programmed into the young. Processes of 'selective amplification' occur in direct relationship to the frequency and intensity of environmental stimulation. All this is embedded in attachment, consistency, recency and mimicry, such that, in reality, all learning can be termed social and is a reflection of cumulative childhood experiences.

Sroufe (2005) examined attachment history in a 30-year study, showing it to be "related to the growth of self-reliance, the capacity for emotional regulation, and the emergence and course of social competence, among other things. Moreover, specific patterns of attachment had implications for both normal development and pathology."

Attachment and its 'twin', consistency, seem to be implicated closely and continuously in our later functioning as adults. According to Gerhardt (2004): "So the first 'higher brain' capacities to develop are social and they develop in response to social experience. Rather than holding up flashcards to a baby, it would be more appropriate to the baby's stage of development to simply hold him and enjoy him."

What is also clear is that neuron-synapse connections are produced in over-abundance during the early post-natal period. Those concerned with the mapping of 'social' responses seem to be linked crucially to the interactions between the child and its parents and carers. This is not 'rocket science' and has been long established in folklore, general literature and the writings of educationists, e.g. de Lissa (1939) on unhappiness and insecurity in small children. In short, the characteristic way a close adult behaves will influence the child's emotional behaviour. This seems implicated in helping establish individual patterns of brain development, thus setting those ever-more-common avenues of expectation that begin to typify a person's response to the environment. We also know that if persistent stress occurs, either during foetal or post-natal development, the brain is likely to produce serotonin and noradrenaline at above-normal levels. Such over-activity can then itself become a 'typical' process, feeding back to affect both responses and behaviour regulation. Both hormones are impulse modulators whose levels in the brain can critically affect behaviour and the body's 'alarm system' (Perry 1997; Kotulak 1998).

It is clearly unwise to think of early learning as irredeemable, but it is equally inadvisable to pay inadequate heed to it. Countless studies show a high degree of predictability between the behaviour of the 3-year-old and that of the adult. We also know that the brain continues to grow during adolescence and that learning continues throughout life. We know especially that the human being is a social animal and seems hardwired for language and the need for love and belonging. Higher order thinking protocols can be changed at any stage of life, although it is usually difficult to do this over a base of strongly internalised childhood learning. During normal childhood, especially during the first 3 years or so, the foundations of language are laid down securely, as are the major parameters of the child's attitudes and dispositions towards others and the outside world.

The important thing to note is that, while plasticity and process are vital to brain development, variations in outcome are very large and appear to be associated with considerable variations in rates of development. There may be significant gender differences in the brain too, which can account for some of this, with female brains being somewhat denser in grey matter. Boys and girls, women and men are often better at different things, although within group differences can be very large. For example, females have been observed to be better at identifying matching items at speed and at most language functions; they are also said to be better at 'multi-tasking'. Males tend to be better at gross motor movement and mechanical and spatial skills. The point at issue here is that, while there may be genetic predispositions, these tasks are overlaid with cultural intent, family and social meaning and reward very early on in the child's lifetime (Smith 2001; Bailey 2002).

It would appear that some children appear more vulnerable to stress and some are markedly more resilient. Evidence suggests that they were born this way and that the genes provide the basic ingredients for the later 'recipe of the mind'. Investigations of stress tend to confirm such a view (Perry 1997; Greenspan 1997). While some stress is necessary for normal human functioning and for facing challenge (challenge often precedes repetition and mastery), stress is the result of not being able to perceive or control the situation or experience and it results in rising levels of cortisol, the 'stress hormone'. If this process continues or becomes habitual, the body can fail to function or deal with the situation. In extreme cases, where traumatic and highly stressful events are the norm in the early developmental stage, the human brain responds with a disrupted, irregular and, eventually, dysfunctional series of responses and these may well limit the range of reactions that the child can make (Perry 1997).

Overall, advances in knowledge of the developing brain, particularly those resulting from the last two decades or so, have led us to re-emphasise the interactive, compelling and crucial nature of the early years of life. Research certainly concurs with the notions that the brain thrives in a nurturing social environment that provides consistency and reliability of attachment, together with interventions that secure the child yet enable her to explore and play safely (Shonkoff and Phillips 2000; Smith 2001; Gerhardt 2004; Sroufe 2005).

However, research cannot support any specific or universal features of curriculum design or styles of learning that should be imposed on all children. We may think we know about the stages of awareness that the infant goes through (and these can certainly help guide us in selecting appropriate settings, ratios of adult staff to small children, observations and attention to play and exploration), but we must still be very cautious. According to Lally (2007), we must ensure special attention to the following features in our provision outside the home, so that we prepare the 'optimal' conditions for effective learning:

- The child has a principal, close and loving caregiver, such that there is consistent attachment
- The child has the opportunity for small groups and genuine intimacy of concern
- The child has clear continuity of attachment as she grows
- Care and response is always personalised and appropriately matched
- Care is culturally sensitive and aware of different family and cultural needs
- Care pays close attention to any special needs and conditions.

Note, however, that such conditions do not dictate content, sequence or specific hierarchies of learning and that the term 'care' is used in a generic sense.

We must also recall that there are other periods of crucial learning and re-learning during our lifetimes, notably that of adolescence. We must pay careful attention to early learning and do our utmost to facilitate it, but we must not regard early experience and learning to be so fixed in the mind as to be incapable of change or remediation later on.

## The social agenda and future possibilities

There is no overriding cause for the current state of ECEC provision throughout the world. Rather, there is a coalescing of forces and changes that impact critically upon our children. The main ones are as follows:

- The greater emancipation of women
- Efficient, cheap and safe contraception
- A decline in the birth rate
- Increasing numbers of women in the work force

- High divorce rates
- Recent compelling research on early brain development
- The persistent and debilitating effects of poverty and the roots of crime
- Conflicting value systems in a more fluid, post-modern world
- The increasing influence of technology and the media
- The globalisation and interlinking of economies.

OECD (2006) records ten imperatives for policy and leadership and sets them out as follows (author summary):

1. Reduce levels of child poverty above all else.
2. Adopt an integrated vision of the ECEC system and organise accordingly.
3. Actively steer the system from the centre, while at the same time ensuring agreement at local level about the aims, programmes and funding.
4. Allocate adequate public funds so as to achieve system aims and quality pedagogy and care, overcoming the limitations of adopting a 'places' approach (the crude uses of funding per capita attending formulae).
5. Pay especially careful attention to the 'under-served' birth to 3 years age range in a thoroughly integrated vision of services available.
6. Focus research and resources on children with diverse learning patterns and reduce targeting and remedial approaches.
7. Value and encourage family and community involvement.
8. Use the stakeholders (and the professions) to help co-construct broad, sustainable and appropriate 'curriculum' goals.
9. Provide adequate preparation, initial training and continued professional development of staff and engage them in thoroughly participatory approaches to quality development and maintenance.
10. Create visionary, broad perspectives of learning, participation and democratic ideals.

## Finally...

As a citizen of the world, what might one envisage as the best experience possible for every child born in the 21st Century? What is the proper inheritance to pass on to our children?

- To be born into a friendly, sensitive environment, which is able to 'bathe' the child in good healthy practice, good food, language, love, and a sense of belonging.
- To be born into a safe place where there is no fear, other than the low-level risk of trying.
- To be born into a world replete with interesting sensations, of other adults and children.
- To be born into a world where possibilities are exciting and endless.
- To be born into a world where moral principles are commonly seen and exemplified in everyday life.

How might one achieve such a desirable situation in the world?

- By ensuring well-supported maternity leave, good advice and secure health care.
- By supporting consistent attachment, regular and wise feeding and a stimulating environment.
- By ensuring easily accessed, non-patronising support for the mother and/or family, with quality provision from crèche to daycare, from home visiting to toy libraries, from practical advice to counselling.

What is a clear structural and systemic way of providing most, if not all of these things?

- By putting regulations and clear tax support in place to provide for maternity and paternity leave and for well staffed centres of ECEC throughout the country.

- By providing wise, culturally sensitive, non-intrusive support through pregnancy and from birth.
- By ensuring that the education system supports and helps all young people to know about contraception and parenting and the full implications of child-rearing.
- By providing crèches, care, education, health support, advice and counselling in one central place, where adults and children feel welcomed.

What does such a 'Utopian' social agenda demand?

- Political will: the allocation of resources in a less historical, traditional 'straight-jacket' and an awareness that we are carrying forth an agenda as pioneering as when states and countries laid down provision for their elementary education for all.
- No distinction between education and care and a seamless transition from birth to 8 years (UNESCO 2002).
- Inter-agency collaboration that is broader than simply childcare and early education and that, wherever feasible, involves health, paramedical social work and welfare agency, counselling and training in 'one package' (known in the UK as 'joined-up thinking' by Ministers and the Civil Service).
- Clear and carefully articulated career paths for childcare and allied workers in the field; reasonable salaries; the encouragement of men into the roles.
- Multi-professional teams and unions and professional organisations.
- Physical accessibility to institutions and ensuring they are adult-friendly as well as child-friendly places and open for long periods, preferably all year round and, where appropriate, able to accommodate shift work patterns.
- Good, unambiguous quality control of the environment, qualifications and programmes.
- Care to avoid too intense a 'schoolification' (UNESCO 2002) of the very early years. Play to be understood as iconic, appropriate, paramount and intrinsic to early learning.

The above simply spells out what several countries are trying to establish, i.e. the effective integration of service provision from birth (and before) to 8 years of age or so. Many countries have established, or are establishing, semi-integrated services to supplement and support the family and to ensure that society is fairer, more cohesive and more rewarding for all. While there is no 'single best buy', there is a wealth of well-validated research, some of which has been discussed, showing that, if we take it forward into the future, carefully integrated provision will help to achieve the following:

- Alleviate poverty
- Support welfare-to-work programmes
- Give parents more autonomy, yet involve them
- Create community pride
- Improve children's approaches to school learning
- Support long-term social cohesion and reduce crime.

Perhaps at long last we are beginning to "understand the intricacies of developmental processes and also the subtleties of those human relationships which lie at the heart of the educational enterprise" (Morris 1972). It would be good to think so.

I am your laughing, crying, possibility:  
I keep on coming as  
I did before,  
Hoping and hungering  
And with no visible support whatever.  
Naked need is all I offer:  
My extremity is your opportunity.

From 'Child' by Sydney Carter (1955)



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## About the Bernard van Leer Foundation

The Bernard van Leer Foundation funds and shares knowledge about work in early childhood development. The foundation was established in 1949 and is based in the Netherlands. Our income is derived from the bequest of Bernard van Leer, a Dutch industrialist and philanthropist, who lived from 1883 to 1958.

Our mission is to improve opportunities for children up to age 8 who are growing up in socially and economically difficult circumstances. We see this both as a valuable end in itself and as a long-term means to promoting more cohesive, considerate and creative societies with equality of opportunity and rights for all.

We work primarily by supporting programmes implemented by partners in the field. These include public, private and community-based organisations. Our strategy of working through partnerships is intended to build local capacity, promote innovation and flexibility, and help to ensure that the work we fund is culturally and contextually appropriate.

We currently support about 140 major projects. We focus our grantmaking on 21 countries in which we have built up experience over the years. These include both developing and industrialised countries and represent a geographical range that encompasses Africa, Asia, Europe and the Americas.

We work in three issue areas:

- Through “Strengthening the Care Environment” we aim to build the capacity of vulnerable parents, families and communities to care for their children.
- Through “Successful Transitions” we aim to help young children make the transition from their home environment to daycare, preschool and school.
- Through “Social Inclusion and Respect for Diversity” we aim to promote equal opportunities and skills that will help children to live in diverse societies.

Also central to our work is the ongoing effort to document and analyse the projects we support, with the twin aims of learning lessons for our future grantmaking activities and generating knowledge we can share. Through our evidence-based advocacy and publications, we aim to inform and influence policy and practice both in the countries where we operate and beyond.

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