

Policy Analysis of New Zealand’s 10-Year Strategic Plan for Early Childhood Education, *Pathways to the Future: Ngā Huarahi Arataki 2002–2012*

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Abstract

In 2002 the New Zealand Ministry of Education published a 10-year strategic plan for early childhood education entitled *Pathways to the Future: Ngā Huarahi Arataki 2002–2012*. The development of this policy was informed by an extensive literature review on early childhood education within New Zealand and overseas. This paper provides critical analysis of that literature review. It argues that the manner in which the literature review was carried out led to the development of an unbalanced policy, undermining the important role of parents in raising their children in particular. Methodological issues are discussed in detail and directions for further research in this field are suggested.

In 2002 The New Zealand Ministry of Education published *Pathways to the Future: Ngā Huarahi Arataki 2002–2012* (PTF:NHA), its inaugural 10-year strategic plan for early childhood education (ECE). The aim of the strategic plan is to fulfill the government’s commitment to “lifting the educational achievements of all New Zealand children” and to create a “common vision of what success looks like” (New Zealand Ministry of Education [Ministry of Education], 2002, p. 4) for ECE sector workers to share. In order to align policy development with contemporary research knowledge, the Ministry of Education sought to develop a robust information base to feed the strategic planning process. As a result, Smith, Grima, Gaffney, and Powell (2000) were commissioned to provide the Ministry with an overview of the most current thinking and developments in this area, and in 2000 published *Early childhood education: Literature review report to the Ministry of Education* (ECELRL). Together, the PTF:NHA policy report and ECELRL report were extensive and far-reaching in terms of researching and providing support for the creation of nonparental education facilities; however, other important aspects of early childhood education remain uncharted. Most prominent in these shortcomings is the lack of attention to the critical role that parents and family play in early childhood learning and child development. In this review of these policy documents, it is argued that a broadening of the

current PTF:NHA plan is required to reflect a more integrated approach which embraces significant family support mechanisms. Such an approach not only enhances social and academic outcomes at the level of the individual child, but also accrues benefits that extend into the wider community to profit the nation as a whole. To substantiate this viewpoint, a critique of the ECELR literature review is presented. Considerations for future reviews that aim to provide policy makers with robust findings from evidence-based literature are also discussed.

Overview of the PTF:NHA: A Strategic Plan for Early Childhood Education

The strategic plan outlined in the PTF:NHA covers a broad range of issues relating to early childhood education and sets out three core goals: (a) to increase participation in ECE services, (b) to improve the quality of ECE services, and (c) to promote collaborative relationships. The authors of the document declared that major changes in the focus of ECE in New Zealand are needed to achieve these goals including new funding and regulatory systems for ECE services, more support for community based services, the introduction of professional registration requirements for teachers, improved communication and collaboration between related services and parent support, and greater government involvement, especially in communities where current participation in ECE is low. To facilitate these changes, “a comprehensive network of interconnecting strategies to focus the activity of all sector partners” (Ministry of Education, 2002, p. 3) was outlined in a series of steps, including evaluation. In accordance with New Zealand’s Treaty of Waitangi, which celebrates biculturalism (Barrett & Connolly-Stone, 2006), and to accommodate the concerns of the country’s significant population within the Pacifica community, the PTF:NHA report paid special attention to issues relating to Maori and Pacifica communities and it outlines the proposed strategic journey to achieve its core goals (for details see Ministry of Education, 2002, p. 22–23). It is also noted that, “the seven steps of the plan are not linked to specific years. Rather, they indicate how actions need to be sequenced” (Ministry of Education, 2002, p. 23).

Early Childhood Education: Literature Review Report to the Ministry of Education (ECELR)

The ECELR report provided an extensive and comprehensive overview of local and international research and policy literature covering many of the issues surrounding early childhood education. The report’s eight chapters cover issues such as participation in ECE programs, the importance of early experience, the effects of ECE, issues surrounding the quality of ECE, the effects on families of participation in ECE, and ECE policies. Each chapter ends with a section highlighting key messages from the research and offers recommendations for further research. In the final chapter, the importance of good quality early childhood education over the provision of specific types of services and the significant contribution New Zealand has made in the field of ECE research, policy and practice is emphasized. The need for further longitudinal, mixed methods research to catalogue the effects of ECE from various perspectives over time, including that of the child, is highlighted, as is the need for more collaborative national and international research to explain differences in ECE findings from studies in diverse cultural settings. By providing policy makers with fundamental research information regarding ECE, the ECELR was a primary influence in developing and shaping the 10-year strategic plan described in the PTF:NHA for New Zealand. The literature reviewed in the ECELR strongly supported the notion

that the early childhood era is crucially important in child development terms, representing untapped learning potential which, if nurtured and nourished, can transform a child's outcomes (see Barnett, 1995, 1998; Schweinhart, 2003). In the following sections, the links between literature reviewed in the ECELR and the core goals promoted in the PTF:NHA report are critically reviewed.

Increasing Participation Rates

The first goal in New Zealand's 10-year strategic plan for ECE highlights a determined need for the country to focus on strategies to increase participation in early childhood educational services for the nation's children and their families. Such services concentrate on nonparental caregivers providing education and care either in a centre, or within the caregiver's or child's home(s). Data from the Ministry of Education provided in the ECELR indicated that 56% of all New Zealand children under the age of 5 years were "currently . . . enrolled in an early childhood education service" (Smith et al., 2000, p. 17); and that 100% of 4-year-olds and 76% of 3-year-olds were enrolled in nonparental services in 1999 (Smith et al., p. 17). Participation rates of children and families in early childhood education programs provided in Kamerman's (2000) overview of ECE in OECD countries affirmed the ECELR findings that showed participation rates varied significantly as a function of age. Data provided by Kamerman indicated participation rates for New Zealand children were 25% at ages 0–3 years and 85% at ages 3–6 years. A similar participation rate of 86% of children aged 3–6 years in 2000 was reported in New Zealand's 2002 Social Report (New Zealand Ministry of Social Development, 2006, p. 27). In general, rates of participation of children in ECE programs in New Zealand compared favorably among the other 19 countries that participated in the study. New Zealand was ranked fourth with regards to the 3–6 year-old group, behind France (99%), Belgium (97%), and Italy (95%), and ranked seventh for infant participation.

If participation in nonparental ECE has any long-term effects on children's educational outcomes at the national level, one would expect this to be reflected in positive correlations with academic outcomes during the school years. Correlating this participation in ECE programs with outcome data presented by Ogle et al (2003) for the 2001 Progress in International Reading Literacy Study (PIRLS) provides an interesting insight into the strength of this relationship. Findings from PIRLS, which compared fourth-grade reading and literacy skills among OECD countries, showed that the performances of schoolchildren in Italy, New Zealand, and France on literacy measures were ranked 10th, 12th, and 18th respectively (Belgium did not take part). The correlation between the national average of fourth-grade literacy scores of school-aged children and rates of participation in nonparental ECE for children ages 3–6 years was moderate but in a negative direction, $r = -0.64$, and for ages 0–3 years was weak and in a positive direction ($r = 0.19$). These results, however, must be treated with caution since only 8 out of 19 countries participated in both studies and contributed to the calculation of the correlation coefficients. Despite this limitation, and the fact that this calculation was a rough ecological comparison with very limited validity (Abramson, 1995), the analysis raises an important question: Is the rate of participation in early childhood services the major factor affecting educational outcomes (within OECD countries), or are other factors more influential in predicting long-term academic or social outcomes?

As mentioned above, it is noteworthy that New Zealand's participation rate for children aged 3–6 years was high relative to other OECD nations. Therefore, any significant increase in the overall participation rate suggests that children under the age of 3 years will be increasingly

targeted as possible participants in ECE programs (resulting in increased numbers of very young children spending less time with their parents). Whether young children benefit from participation in nonparental care is an area of much discussion in the literature. Caughy, DiPietro, and Strobino (1994), for example, found that while the impact of childcare participation for very young children from high-risk environments was beneficial (high scores on Peabody Individual Achievement Test), participation of children from more optimal environments in childcare settings had either no effect or an increased risk of poor outcomes.

On the other hand, a considerable body of literature (for example see, Kendrick et al., 2000; Moran, Ghate, & van der Merwe, 2004; Serketich & Dumas, 1996; Sweet & Appelbaum, 2004) has indicated that parental support and training positively affect both parental skills as well as children's outcomes such as social behavior, and school achievements. These findings are particularly important since they are based on systematic reviews and meta-analyses that controlled for a range of home/family settings and structures.

Given that academic and social outcomes for children are of the prime interest to ECE policy makers, alternative solutions relating to increasing families' and parents' capabilities to be fundamental actors in their children's lives and contribute to positive outcomes for their children must be of paramount importance. The benefits of improving family environments could outweigh those of early participation in ECE services for some children. Unfortunately this area was not thoroughly addressed in the background literature review and is not covered in New Zealand's 10-year strategic plan as outlined in the PTF:NHA.

Increasing participation rates in ECE in New Zealand through the provision of "funding to support access to affordable, quality ECE services" (Ministry of Education, 2002, p. 11) was a strategic initiative proposed by the Ministry of Education. The importance of subsidizing fees was discussed in the ECELR and substantiated with findings from studies conducted by Blau and Hagey (1998) in the United States, in which the authors estimated that "full subsidization of child care would lead to a 20 percent increase in the use of paid care" (p. 117). While the 10-year strategic plan for ECE in New Zealand does not specifically indicate an intention to offer full subsidies for ECE fees, there are reasons to be cautious in any approach that increases the number of ECE spaces without attention to quality. Missing from the ECELR report were Blau and Hagey's findings that show "a decrease in the price of care causes an increase in hours of care demanded and a decrease in the demand for quality-related attributes" (p. 124). Further, although ECE program fee subsidization can lead to an increase in ECE participation, this effect may be of greater benefit to children and families in nations where initial participation rates are low. For example, in the United States, ECE participation rates are considerably lower than in New Zealand and fall to 71 percent for children aged 3–6 years and 26 percent for those under 3 years. Introducing ECE program fee subsidies in the United States may be of greater benefit to parents who have not previously sought support from ECE programs than in New Zealand, where the benefits that accrue are for parents already making use of ECE services.

A number of studies discussed in the ECELR linked participation in nonparental early childhood care with the employment status of mothers (Erdwins & Buffardi, 1994); other studies reported a strong association between nonparental care participation and family income (Fuller, Holloway, & Liang, 1996; Steen, 1994). Without fully understanding the complexity of issues such as the reasons for mothers entering the workforce, it is hard to identify optimal and effective strategies that will assist in achieving the government's goal for increasing participation rates in ECE. Furthermore, the priority for such analysis must be to separate and compare the risks and benefits for subgroups of children enrolled in nonparental ECE, including children

whose mothers are employed in the workforce. The ECELR suggested that accessibility is a barrier to participation in nonparental ECE services in New Zealand. Several options to improve accessibility to ECE programs were considered in the ECELR, including government subsidization or bulk-funding kindergartens. However, the notion of home-visiting programs received very little attention in the ECELR report and subsequently in the PTF:NHA document. While parent support and development programs exist in New Zealand, such as the Home Instruction Program for Preschool Youngsters (HIPPY;¹ Barhava-Monteith, Harre, & Field, 1999) and Parents as First Teachers Program (PAFT;² Ministry of Education, 2002, p. 5), and a review of parenting programs has recently been carried out for the Families Commission (Hendricks & Balakrishnan, 2005), the 10-year strategic plan in the PTF:NHA report makes no attempt to increase or develop this area of family support.

Further, few empirical studies have been conducted in New Zealand that concern the efficacy of parent education courses and parent support groups (Davies, Wood, & Stephens, 2002). One exception is the HIPPY evaluation carried out by Barhava-Monteith et al. (1999). This evaluation reported that children who participated in HIPPY programs in New Zealand showed consistently better performance compared to controls on all of the literacy measures, and these differences reached statistical significance on three of the six sub-tests of the Reading Diagnostic Survey (Clay, 1985) and the Behavioral Academic Self-Esteem Scale (Coopersmith & Gilberts, 1982).

In 2005, the government of New Zealand invested \$4.6 million in ECE centers with the “aim to improve support for parents of young children with a particular focus on vulnerable families with children aged 0–3” (New Zealand Ministry of Social Development [Ministry of Social Development], n.d., Early intervention in early childhood education centre based parent support section, para. 1). This pilot project aims to “help parents build on their parenting skills and knowledge, improve their connection and access to broader social support services . . . and achieve better co-ordination between children’s experiences at home and in ECE” (Ministry of Social Development, n.d., Early intervention in early childhood education centre based parent support section, para. 3). This is laudable progress, but may remain more an appendage than an integrated part of an early childhood education policy.

Improving Quality of ECE Services

A second aim of the 10-year strategic plan is to improve the quality and delivery of ECE services in New Zealand. This goal is of paramount importance, and the bulk of the plan justifiably focuses on many of these issues. However, one area that seems to be rather lightly considered is that concerning the components of the ECE curriculum. This situation could stem from discrepancies in the research presented in the ECELR. In a section entitled “Messages from Research,” the claim was made that “having some early childhood program experience appears to matter more to children than exposure to any particular curriculum or program model” (Smith et al., 2000, p. 42). While this claim arose from studies that showed exposure to ECE programs

¹ Home Instruction for Parents of Preschool Youngsters (HIPPY) is a parent involvement, school-readiness program that helps parents prepare their three-, four-, and five-year-old children for success in school and beyond, which was developed by Lombard (1994).

² Parents as First Teachers Program (PAFT) is a support program based on a belief that parents are their children’s first and most important teachers. Support and guidance are offered to parents by trained parent educators, primarily within the family home but also in other settings such as play centers and to groups such as teenage parents (Farquhar, 2002).

had a positive effect on the learning and development of children, irrespective of the model used to guide the program, the ECELR report did not investigate research on aspects of early childhood curriculum that contributed to these outcomes. This shortcoming is illustrated by statements such as this: “The following are some of the main components of process quality which have been shown by research to affect outcomes for children . . . curriculum, program planning (and an emphasis on children learning, not just adequate custodial care) and adult collegial relationships” (Smith et al., p. 61). Such broad-based evaluative statements make it difficult to determine whether or not the curriculum is important, or to what extent any particular parts or components of the curriculum model might affect children’s social or academic outcomes.

Promoting Collaborative Relationships

A third goal of the 10-year strategic plan involves promoting collaborative relationships among parents and educators in ECE facilities and in schools. The need for creating seamless transitions for children between early learning environments and formal schooling was recognized in the ECELR in the form of objectives to increase information flow between parties. The crucial role of parents and family in the child’s early development and learning environment was therefore acknowledged in the ECELR, but it is argued here that greater focus on supporting and enhancing the child’s home environment is required to result in the range of positive outcomes possible at multiple levels for children. An interactional-contextual approach targeting the whole child, rather than an individualist approach that abstracts the child from his or her environment, is more likely to sustain the cognitive gains accrued by the child through early learning experiences (Kagiticibasi, 1993). Programs that initiate changes in parenting styles and family attitudes can lead to changes in the emotional atmosphere within families, stimulating better parent-child communication, less physical punishment, and generally closer family relations. Thus, the benefits of such programs are far-reaching: By promoting positive growth within entire family units, all siblings will potentially benefit from parents’ improved support, knowledge, and understanding (Kagiticibasi, 1993, 1997).

Developing a notion of sharing responsibility for the child between state and family enables a more integrated approach to ECE policy development. Within an environment of trust, respect, and shared cultural knowledge, strategies are implemented to improve parenting skills and parental education and to increase levels of parental information through a more active, systematic approach where parental participation in the planning, implementation and evaluative processes of ECE service delivery is supported and encouraged (Haddad, 2001).

Recently, Paxson and Schady (2005) and Schady (2006) reviewed a range of prevention approaches that have been shown to benefit child development (e.g., Perry Preschool Program, pilot Carolina Abecedarian Project, Head Start, etc.); however, Schady concluded that low parental education levels played a causal role in explaining poor child health, which, in turn, was likely to negatively affect skill development in young children in these prevention programs. Inadequate knowledge of the returns of parental investment in early childhood experience, of the benefits of specific policies or programs, and of parenting practices may all have contributed to low levels of skill formation and the acquisition of important cognitive or noncognitive abilities of children at an early age. Taken together, the findings reported in the ECELR are suggestive of an approach that subtly undermines the role of the parent and concentrates on the provision of nonparental services, usually provided outside the home. Early on in the report, the authors conceptualize early childhood education as “organised, supervised programs with social

educational goals for children in the temporary absence of their parents” (Smith et al., 2000, p. 8) and later, they caution that “a society cannot maximise their children’s potential if child care choices are left to parents alone” (Smith et al., p. 120). This inability to trust parents in decision making about their children’s education is reflected throughout the ECELR, in which access by children to high-quality ECE services is regarded as critical, for “they [children] may not be exposed to high quality early learning experience in the home” (Smith et al., p. 9). This approach fails to acknowledge that parents have the primary responsibility for their children’s upbringing and healthy development and, as such, are entitled to access comprehensive systems of parent support services and/or early childhood activities, free of obligation.

In European and Scandinavian countries such as the Netherlands (Netherlands Youth Institute, n.d.) and Finland (Henricson, 2003), parental responsibility for children’s early development is accepted by policy makers, and educational outcomes of school-aged children are high relative to other countries that participate in international student assessments (Mullis et al., 1997; Mullis, Mullis, Martin, Gonzalez, & Kennedy, 2003; Välijärvi, Linnakylä, Kupari, Reinikainen, & Arffman, 2002). This finding suggests that increasing involvement of parents in children’s early lives is by no means detrimental to child development. The conclusion of the ECELR, that provision and participation of children in nonparental early education services is of more benefit to children than an integrated approach that embraces parents and family, is particularly puzzling since the review’s conceptual framework took an ecological perspective based upon the Bronfenbrenner (1979) model. Bronfenbrenner depicted multiple societal systems that influence child development in concentric circles about the individual child. The innermost circle about the child, referred to as the microsystem, represents the most direct day-to-day reality for children and families, such as their home, school or neighborhood settings. As the child ages, this microsystem becomes more complex and involves more people, but as Bronfenbrenner noted, as long as this complexity generates an increased number of stable reciprocal relationships for the child, the expanding social environment will enhance child development. The linkages or interrelationships between individuals’ social networks in diverse settings are viewed as separate systems, the mesosystems, and the stronger and more diverse the links are between settings the more powerful an influence the resulting systems will have on the child’s development. Thus the quality of the child’s mesosystem cannot be influenced only by the initiatives of the child, but also through the parents’ involvement in linking the home and the school experience. The penultimate circle or system, the exosystem, influences the quality of interrelationships between settings and examples include a parent’s workplace, a community or network of friends, school boards, social services, and planning bodies. The outermost level, the macrosystem, represents the dynamic blueprints or social forces and their interrelationships that shape human development. Broad interconnected beliefs, attitudes, and social systems, such as economics, media, immigration or public policy decisions, all reflect the ecology of human development and are all vulnerable to gradual or sudden change through evolution, revolution, economic recession, or technological advances.

In their review of early childhood education literature, Smith et al. (2000) singled out two microsystems, the early childhood setting and the family setting: “A major message emerging from the existing literature on early childhood education is that one cannot consider the two microsystems of family and early childhood centre in isolation”(p. 9), but the report went on to state that “the focus of our attention is on the early childhood education microsystem” (p. 9). The document provided abundant data and literature to support the value and importance of nonparental interventions and services, effectively undermining the relevance, value, and

importance of the family microsystem. As noted earlier, a number of researchers and scholars have highlighted the benefits of an approach to ECE that embraces a child's environment rather than extracting him or her from it (e.g., Anderson et al., 2003; Illig, 1998; Kagitcibasi, 1993, 1997; Kameron et al., 2003). By educating members of the family unit in addition to the child (most often the mother), the culture of the family not only provides sustainable support for the child and future siblings but also enhances the overall well-being of parents and families through improved communication skills, less punishment, and greater understanding of wider systems and services. Kagitcibasi (1993) studied 255 families (90 cases, 165 controls) involved in the Turkish Early Enrichment Project (TEEP), an early prevention approach that provided socioemotional and cognitive support to the child through a mother-training program, which included cognitive and mother-support components. Results showed that on average, children of mothers who took part in parent education groups had an 86 percent school retention rate, compared to 67 percent for children in the control groups. Children in the intervention also scored significantly higher than controls on IQ measures, analytical training, and classification tasks; they also achieved higher grades, most notably in Turkish language and mathematics. Both mothers and children in the treatment group were more self-confident and had higher expectations of educational achievement. In addition, the program allowed the mothers' literacy skills to improve and "equally important was the positive change in the mothers' sense of self-efficacy" (Kagitcibasi, 1997, p. 71). These encouraging findings precipitated the establishment of Turkey's Mother Child Education Foundation in 1993. Further, HIPPY has been condensed and redeveloped to such success that "the Ministry of Education has now changed its policy of preschool education to include nonformal education in addition to formal preschool" (Kagitcibasi, 1997, p. 72). A few years later, Kagitcibasi, Sunar, and Bekman (2001) reported on the long-term (10 years) effects of TEEP, the Turkish HIPPY, and concluded that, "home-based early enrichment through the mediation of the mother is a highly effective strategy with multiple positive outcomes in contexts of socioeconomic disadvantage" (p. 333).

While Kagitcibasi's (1997) work was cited in the ECELR as a means to generate general indicators for effective parent education programs, Smith et al. (2000) ignored the essence of the holistic approach of TEEP and the dramatic changes in Turkish government policy as a result of these studies and interventions. Similarly, studies by Ramey and Campbell (1987, 1991) and Ramey and Mills (1977) were cited in the ECELR as evidence to show the benefits of early ECE (i.e., nonparental education) for children of high-risk families (Smith et al., 2000, p. 31). However, more recently, Ramey and Ramey (1998) have proposed an intergenerational framework for clarifying the goals, components, and developmental outcomes of an early intervention program that emphasizes both child *and* parent development and encourages early intervention programs that build on individual family history, beliefs, values, and routines. In their biosocial developmental contextualism model, Ramey and Ramey emphasized the major role that parents play in children's cognitive, social, and emotional development: "A range of resources and activities can be used to promote changes in children, parents and the family's environment [and] early intervention supports may be focused on (a) the family as a unit . . . (b) parents or primary caregivers . . . and (c) the child" (p. 114). Further, Ramey and Ramey concluded that early prevention programs, which do not directly alter "children's daily social transactions—particularly in terms of the presence of developmental priming mechanisms—will not produce measurable benefits in the children's development" (p. 119).

Parental practices have been found to have a major influence on children's outcomes, including but not restricted to educational attainment, emotional status, delinquency, and a

variety of school performance measures (Dobow & Ippolito, 1994; Eamon, 2000; Flouri & Buchanan, 2002; Guo, 1998; Korenman, Miller, & Sjaastad, 1995; Wylie, Thompson, & Lythe, 2001). Family support and education programs in nations throughout the world feature a variety of approaches ranging from the provision of tangible support such as financial aid, housing, or food, interventions that target the child directly, educational and support programs for parents at risk, through to multi-target programs comprising a combination of components (Shulruf, 2005). MacLeod and Nelson (2000) found that outcomes for families and children participating in multifunctional family support (family wellness and prevention of child maltreatment) were 66 percent better than outcomes for nonparticipants. The following is a brief review of the research literature available on effects of parenting styles on children's outcomes, and benefits of providing parents with the tools to create stimulating home environments through access to home-visiting programs.

Poverty, especially during early childhood years, has been consistently shown to have a negative influence on children's academic and social outcomes (McLoyd, 1998). Although Guo and Harris (2000) reported that living in poverty was not predictive of children's intellectual development, they also showed that the amount of cognitive stimulation and socialization provided by parents in the home was an important contributor to children's intellectual development. This finding builds on McLoyd's proposition that the link between socioeconomic disadvantage and children's poor academic outcomes appeared to be mediated by harsh and inconsistent parenting and the child's exposure to chronic stress. Similarly, Eamon (2000) concluded that parenting style was between two to six times more powerful in its influence on children's behavior than the family's economic status. Livner, Brooks-Gunn, and Cohen (2002) found in a number of studies where results from the Home Observation of the Measurement of the Environment (HOME)³ were reported, that parenting practices mediated the relationship between income and children's behavior problems and moderated the effect of poverty on children's social and academic outcomes.

Further, a recent National Institute of Child Health and Human Development (NICHD) survey report (2001) also placed more importance on the role of the family than on nonmaternal care as a predictor of children's social and academic outcomes than had been reported earlier: "Type and stability of non-maternal care had limited predictive value. Family factors, including maternal sensitivity, quality of home environment and income were more consistent predictors of children's outcomes than any aspect of early non-maternal care experiences" (p. 457).

The influence of families and parents on children's outcomes has also been investigated in a recent review carried out for New Zealand's Ministry of Treasury. Jacobsen and her colleagues (Jacobsen et al., 2002) emphasized the importance of children's early years and "within home experiences" (p. 21) for future outcomes. With outcomes in later life reflecting a complex interplay between genetic and environmental factors, it was suggested that 10% to 20% (p. 22) of the variation in individual outcomes could be causally attributed to differences in family and home environment during childhood. Providing a child with a stimulating and nurturing environment would assist brain maturation and development of cognition, language, literacy, emotional regulation, curiosity, the ability to care for others, creativity, and motor skills. Further, an early history of responsive care-taking and secure relationships with parents could reduce an individual's vulnerability to subsequent environmental threats (p. 14).

³ HOME outcomes include emotional and verbal responsiveness of the parents, acceptance of child's behavior; organization of physical and temporal environment, provision of appropriate play materials, parent involvement with child, and opportunities for variety in daily stimulation (see Bradley et al., 1989; Caldwell & Bradley, 1984).

The importance of a stimulating home environment was further emphasized in the PIRLS report of 2001 (Mullis et al., 2003). In this report it was revealed that across the 35 countries surveyed, there was a positive relationship between reading achievement at fourth grade and students having engaged in early literacy activities before starting school (e.g., reading books, telling stories, singing songs, playing with alphabet toys, and playing word games). In addition, fourth-grade students from homes that had many children's books (more than 100) displayed higher reading achievement than those from homes with 10 or fewer children's books (Mullis et al., 2003).

In their paper that discussed the need for coordinated national policy on family support in the home and on home-visiting programs, Roberts, Wasik, Casto, and Ramey (1991) put forward several recommendations to ensure that those devising and delivering home-visiting programs and services made the family central and active participants in interventions, took into account diverse family needs, and made the best use of community resources. Their recommendations included the following: (a) recognizing family needs and so "shift the focus of services from individuals to families asking not simply what does this child need? But also, what supports does this family need to help their child?" (p. 133); (b) recognizing "that changes in one individual in the family must be viewed as potentially affecting all members, and that treatment or intervention programs need to consider the family as a unit" (p. 133); (c) considering the family as "part of a larger system of extended family, friends, work and community, all of which should be taken into consideration when working with families" (p. 133); (d) being aware that "families are best served by helping them to enhance their own skills rather than making decisions and implementing solutions for them" (p. 133); and (e) being sensitive to the sociocultural diversity among families in terms of values and beliefs and build on the strengths of each family" (p. 133).

Dunst (2000) described an integrated framework in which children's learning opportunities, parenting supports, and family/community supports can be integrated in a family-centered manner. Building on findings from research that indicated "that informal rather than formal support shows the strongest relationship to any number of child, parent and family outcomes" (p. 99), Dunst suggested that the positive influence of access to resources can be bolstered by providing help in a family-centered, responsive, and participatory manner. This support should be based on positive help-giver beliefs about family competence and capability, family choice, and action based on choice, and positive help-giver responsiveness and support to family decisions.

Findings from these studies support the ecological models put forward by Bronfenbrenner (1979), Kagitcibasi (1997), and Ramey and Ramey (1998) that highlighted the importance of the home environment and parenting practices on children's outcomes, particularly in low-income families, although it should not be assumed that poor parenting is the preserve of such families. Thus, if policy makers are serious about improving the outcomes of New Zealand's children, tactics and approaches targeting the home environment and parenting practice (e.g., educational resources, cognitive stimulation, attachment, social support, etc.) should be seriously considered, particularly as strategies for improving children's outcomes within low-income families. These strategies should not replace nonparental early childhood services but should sit alongside them and be implemented as supplementary services for children at risk, or be used as alternative services for families who do not participate in the mainstream ECE service.

Issues of Methodology in the ECELR

It is uncontested that the ECELR provided a comprehensive review of the issues relating to nonparental early childhood education and the benefit that children and families—mostly mothers—can gain from this participation. Participation rates, the effects of nonparental ECE services on children and families, nonparental ECE quality, as well as related economic and policy issues were also well documented in the review. However, bearing in mind that the ECELR document provided the basis on which decisions regarding policy for early learning and care of New Zealand's children have been made, it is argued that the limited range and scope of information presented concerning the benefits of parental responsibility and involvement in ECE has resulted in a policy that jeopardizes the role of parents. Shortcomings in the methodology have undermined the credibility of the report. These methodological concerns arise in six main areas and are discussed below.

Scope and Objectives of the ECELR

The ECELR did not clearly and consistently define the scope and objectives of the review, especially in terms of the types of ECE to be considered and the target groups. Ambiguous indications of intent make the report difficult to follow, and it is hard to determine the degree to which the review met its objectives.

To illustrate this point, the report opens with a statement claiming to describe the scope of research coverage: “The review covers early childhood education for children from birth to five years of age, in home based⁴ or centre based early childhood programs. The term ‘early childhood education’ is conceptualized as incorporating both education and care” (Smith et al., 2000, p. 7). On the following page, however, the report goes on to state that the scope of the review needs to be broadened in order to address “issues relating to children, to families and to society” (Smith et al., p. 8). Although these statements lead one to assume that the ECELR had the objective of providing a comprehensive review covering all aspects of ECE and care, a sentence in chapter six contradicts this impression: “A lengthy review of literature on parent education was outside the scope of this review, but literature that is specific to other nonparent education goals of family involvement in early childhood, has been focused on.” (Smith et al., p. 77).

It is not until the beginning of the concluding chapter that the original aims of the commission are referred to: “The Request for Proposals asked us to look at *‘the learning and developmental outcomes associated with a diverse range of early childhood services’* [italics added] and at issues of diversity, quality and participation” (Smith et al., 2000, p. 122). If the commission intended that all aspects of ECE services available for children from birth to age five would be reviewed, this was not accomplished in the ECELR since the ECELR was restricted to those issues concerning nonparental education. The decision to restrict the scope in this way was not explained or defended. The objectives of the review, based on the commission's original specifications with clearly defined and defended parameters, should have been set out early in order for the reader to appreciate the extent of the review's coverage and understand clearly what had been omitted and why.

⁴ In this context, “home based” programs referred to nonparental domestic settings, such as Barnardo's home based care and education (Ministry of Education, 2002, p. 5).

Selection Criteria for Resource Inclusion

Any systematic study which aims to provide an unbiased review of the literature should clearly set out, define, and defend all selection criteria, such as the key words used, databases accessed, the availability of publications in full text, the range of publication dates set, as well as the data quality, sample size, and research methodology reported in the literature (for example, see Barlow, Parsons, & Stewart-Brown, 2002; Boaz, Ashby, & Young, 2002; Kendrick et al., 2000). Fully explaining and defending decisions to exclude certain types of publications or research papers and revealing a clear pathway of the literature search undertaken makes the research more repeatable and adds validity to the end product. However, in the ECELR, the authors noted that: “Psychlit was searched using authors that have been identified as key writers in the area” (Smith et al., 2000, p. 15) and, “In addition we looked at very recent presentations and publications from key sources” (Smith et al., p. 16). Unfortunately, no definition for “key writers” or “key sources” was offered. In addition, restricting journal selection to those that were easier to access, a criterion that was also deemed a “determinant of quality” (Smith et al., p. 15) seems problematic. Surely it would be spurious to infer that ease of accessibility is any guarantee of quality?

Selection Bias Within Reviewed Resources

Although the ECELR provided data from a range of sources, the selection of studies did not include those that reported the benefits of parental involvement. For example, there is a notable absence of evidence to suggest that positive outcomes for children are associated with home environment and parental practices (see Baker, Piotrkowski, & Brooks-Gunn, 1999; Bradley et al., 1989; Guo & Harris, 2000; Illig, 1998; Kendrick et al., 2000; Lucas, 1998; Wagner & Clayton, 1999). This finding makes the document vulnerable to allegations of selection bias, especially where no measures are taken to avoid such bias.⁵

For example, while the ECELR described studies from many of the countries covered in a review by Boocock and Lerner (1998), its synopsis did not include research findings from the review in India that showed only minor and short-term effects of nonparental early childhood programs on children’s development. Further, as discussed earlier, the ECELR failed to report the findings from the Boocock and Lerner (1998) review concerning the benefits of the Turkish study on HIPPIY. These studies presented an alternative view to that supporting a focus on nonparental education, and provided evidence to suggest that positive outcomes for children are associated with home environment and parental practices.

A level of selection bias is also suggested by the ECELR’s puzzling view that longitudinal studies were limited in value because they were likely to view children as “passive recipients” or only as “potential adults” (Smith et al., 2000, p. 13). By stating but not substantiating the statement that long-term studies “might ignore and discount immediate aspects of the environment which may cause children unhappiness or suffering” (Smith et al., p. 13), this uncommonly negative view of longitudinal studies was strengthened. One of the most important measures for causal effect between any intervention and its outcomes is changes over time, or the “time-response relationship” (Abramson, 1995, p. 262), which means that the cause should be in place before the effect appears.

⁵For more information on systematic literature searches see Evans & Benefield, 2001; Mosteller & Colditz, 1996; Pawson, Greenhalgh, Harvey, & Walshe, 2004; Sampson et al., 2006; Spencer, Ritchie, Lewis, & Dillon, 2003; Torgerson, 2006.

Interpretation of Data

In some cases, it is not clear whether the authors of the ECELR interpreted study findings in meaningful detail. For example, although the ECELR presented a summary of Barnett's (1998) review of 38 early childhood programs taking place across the United States and referred the reader to a reproduction of Barnett's summary table in Table 1 of the Appendix, it might have been more useful if the ECELR had taken a more analytic approach to summarize Barnett's table using simple calculations to emphasize the conclusions which could be drawn from the data.

For example, Barnett's work provided data on 15 programs. Out of the 10 programs that included home visitations, 7 (70%) showed positive school outcomes. Only 1 of the 5 nonparental programs (20%) showed positive school outcomes—and this program was atypical, providing one-to-one or child-directed play.⁶ Furthermore, none of the nonparental preschool programs showed positive school outcomes. Simple calculations also show that programs with parental components were 9.3 times more likely to achieve positive school outcomes than programs without a parental component. By not interpreting data in this way the ECELR did not draw attention to this important evidence and focused instead on commenting that the “most common conclusion reached by these studies is that effects on cognitive development (including IQ) declines after leaving the programs and these effects are eventually lost altogether” (Smith et al., 2000, p. 35).

Comparison Methods

Nowhere within the ECELR will the reader find quantitative comparisons. Although, in theory, there is no need for quantitative comparisons in reviews aiming to argue the advantage of any particular program or method, making comparisons between studies without explicit common ground undermines the validity of the investigation. The common practice to compare studies is to use meta-analysis or systematic reviews (see Boaz & Pawson, 2005; Boaz et al., 2002; Mosteller & Colditz, 1996) and measuring effect sizes provides common criteria. It is interesting to note, however, that by not including effect sizes in the analysis, the ECELR's claim for valid comparison between programs is questionable.

Forming Conclusions

The process by which conclusions were drawn in the ECELR raises concern, particularly in relation to conclusions or associations drawn from evidence presented in the ECELR where the data was either misinterpreted, inconsistent or only partially considered.

In chapter five, “The quality issue,” the ECELR provided data from several significant studies which compared parental childcare with nonparental childcare (Smith et al., 2000, p. 46–49). These studies (Barnett & Boocock, 1998; Burchinal, Ramey, Reid, & Jaccard, 1995; Giebelhaus & Bowman, 2002; Lamb & Ball, 1998) consistently reported that home influence (parenting style, maternal education in particular) was a better predictor of child outcomes than nonparental childcare. However, no conclusions relating to home and/or parental intervention programs were drawn in the ECELR report.

⁶ The Harlem Training Project provided two hours a week of individual instruction for two- and three-year olds over an eight-month period. The study of the program looked at males participating in the 1966 and 1967 programs over an eleven-year period (Palmer, 1983).

Further, in chapter five, in the section entitled *Communication with and sensitivity to parents/whanau* a number of scholars were cited, such as Dalli (1997), Holloway and Fuller (1999), and Scarr and Eisenberg (1993), who suggested that early childhood educators should receive and accept parents' values and perspectives and adjust activities in the early childhood facilities accordingly (Smith et al., 2000, p. 72–73). However, in the final section, *Messages from research*, this message was reduced to the following statement: "Support and sensitivity towards parents, clear communication and information sharing are likely to lead trusting relationships between early childhood staff and parents". (Smith et al., p. 74). Avoiding mention of respect and acceptance of family/whanau values undermined the value of parents in the decision-making process.

A more problematic issue in the ECELR is that it disregarded its own conclusions, even where these addressed the ECELR's own objectives. In the conclusion of chapter six, "The effects on families of participation in ECE," the authors stated that, "Within an ecological framework of development . . . early childhood services must address issues for families that relate to the micro-system . . . both within the early childhood setting and the family setting" (Smith et al., 2000, p. 98). Yet, the report did not seem to fully consider any beneficial aspect of parental or family programs that took place in the family setting.

Conclusions and Recommendations

The PTF:NHA outlines the first strategic plan for early childhood education in New Zealand and was based on broad knowledge of the issues surrounding early childhood education provided to the Ministry of Education in the form of the ECELR, a wide-ranging review of worldwide research literature in this area. Unfortunately the ECELR was not as inclusive as it could have been and therefore failed at providing the developers of the strategic plan with a balanced report on the evidence to support a range of ECE approaches, tending instead to concentrate more on aspects of nonparental early education programs. By overlooking research on the role of parents and families on the healthy development of children, New Zealand policy makers may not have fully appreciated the potential benefit for our children of parent support programs.

It is not disputed that high-quality, nonparental early childhood education is beneficial for children and families (Barnett, 1995; Currie, 2000; Doherty, Friendly, & Beach, 2003; Kamerman, 1998; Magnuson, Meyers, Ruhm, & Waldfogel, 2004; McQuail et al., 2003; Oberhuemer, Vedder, Kelleher, & Bennett, 2004; Schweinhart, 2003); the question is whether (as the current 10-year strategic plan seems to imply) nonparental ECE programs alone are the best solutions for all families and all children, irrespective of age, culture and circumstance. Many eminent scholars support approaches that embrace family issues and celebrate the crucial role that parents play in the early years of their children's lives (Bradley, Caldwell, & Corwyn, 2003; Brooks-Gunn, Han, & Waldfogel, 2002; Guo & Harris, 2000; Jackson, Brooks-Gunn, Huang, & Glassman, 2000; Zaslow et al., 2006).

It is suggested, therefore, that the current 10-year strategic plan described in the PTF:NHA report would benefit from a broadening of its focus to include a more family-oriented, integrated approach which targets ways of improving a child's whole environment through a range of high-quality prevention strategies. Approaches to support children and families include, but are not limited to the following: home-visiting, family centers and parent education, family communication programs, and parent support initiatives. Improving the within-home environment, particularly for disadvantaged children, provides a safe, stimulating, and supportive environment for the child that facilitates learning through experience. Through change in family

culture benefits to the child extend to siblings and other members of the family. An integrated approach enhances any investment in nonparental early childhood educational services making learning more effective and the positive academic and social outcomes more sustainable, extensive, and less individualistic. The embedded benefits of such interventions will extend beyond the young child and siblings to family, community, and ultimately to the nation.

The well-being of its children is New Zealand's greatest concern. The research described in the ECELR clearly shows that participation in good quality early childhood education is developmentally beneficial for preschool children, both cognitively and socially. However, participation in nonparental activities is not a panacea for the effects of poverty on children and their families. Without support for the family, the gains made by children in ECE programs are unsustainable on an individual level and the result is costly for the nation. This paper urges that policy makers in New Zealand and abroad embrace the role of the family and support a fully integrated approach to early childhood education such that the families can support and sustain the successful development of all of its children and ultimately pass these benefits to the nation as a whole.

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