



MANAAKITIA A TĀTOU TAMARIKI

Children's
Commissioner

WORKING PAPER

PARENTS', FAMILIES' AND WHĀNAU CONTRIBUTIONS TO EDUCATIONAL SUCCESS

July 2013

PURPOSE

1. As Children's Commissioner, I have a statutory responsibility to advocate for children's interests, rights and welfare, and to report on any matter that relates to the welfare of children¹. Education is a key area of interest for me because of its major effect on children's welfare, both now and in their futures.
2. Not all children and young people in New Zealand are achieving their educational potential. We have a long-standing pattern whereby educational achievement is closely correlated with ethnicity and socio-economic status (SES). Improving our education system so that it supports *all* our children and young people is important.
3. However we need to think broadly about how we can help all our children and young people to reach their potential, including thinking outside of institutional frameworks. When we do this, we see that an area deserving further attention is the impact parents, caregivers, families and whānau can have on learning and education success.
4. This paper consolidates the evidence about the impact that parents, caregivers, families and whānau can have on children and young people's learning and education success, and provides a rationale for greater focus and support in this area. I acknowledge my Principal Advisor, Kirsten Sharman, for her work on this paper.
5. A note on terms: by 'educational success', I mean children and young people achieving their potential. By 'parent', I mean any adult who has a caregiving relationship with a child or a young person.

INTRODUCTION

6. Both formal education settings (like early childhood education (ECE) services and schools) and the broader environments in which children and young people live and learn (like homes and communities) are important for their educational success. Because of the complementary nature of these environments, there is little to be gained from debating which is *more* important. The evidence is clear that quality teaching and leadership in ECE and schools and good relationships between schools, homes, teachers and students can have positive

¹ My powers, functions and responsibilities are contained in the Children's Commissioner Act 2003.

impacts². This paper shows that simple things like adults talking, playing, singing and reading to young children at home and in the community can also have positive effects.

7. This paper provides a rationale for greater focus on supporting homes, parents, caregivers, family and whānau, including evidence on why home environments matter and why focusing solely on ECE and schooling will not be enough to ensure that all children and young people succeed. The specific role of parents and caregivers will be explored, including their characteristics, behaviours and investments in their children, and their attitudes and values. The findings discussed are taken from very large-scale and often international studies. This paper will place them in context, and wherever possible, use New Zealand-specific findings.
8. This paper does not review specific interventions or programmes and does not provide specific policy recommendations. Instead it describes the parenting behaviours and attitudes that have major impacts on developmental and educational outcomes. We hope that this evidence will be useful to those designing interventions and policies to promote children's learning, development and educational success. Such policies should be multi-faceted and address (for example) poverty reduction, social services and community development, and health and education promotion.

BACKGROUNDS MATTER

9. Socio-economic status (SES) is a measure of social and economic factors. In research, students are typically assigned to low-high SES groupings according to their level of household income and their parents' educational qualifications. SES backgrounds matter to childhood as well as adult outcomes. It is well evidenced that children and young people who have less (i.e. those from lower SES backgrounds) tend to do worse. The educationalist Helen Ladd writes that:

"... Study after study has demonstrated that children from disadvantaged households perform less well in school on average than those from more advantaged households. This empirical relationship shows up in studies using observations at the levels of the individual student, the school, the district, the state, the country³."

² Mitchell et al (2008), Nasim (2010), Alton-Lee (2003), Robinson et al (2009), Bishop et al (2009), Biddulph et al (2003). Mitchell et al reviews the outcomes of early childhood education and finds participation in high quality ECE to be a significant contributor to increased educational success. Nasim finds good teacher-child relations at 14 to be associated with academic progress, and a worsening relationship with reduced outcomes. Alton-Lee finds quality teaching a key influence on high quality outcomes for diverse students, and estimates around 60 percent of variance in student performance is attributable to differences between teachers and classes, but only around 20 percent or less of variance attributable to school level variables. Bishop et al is an output from a larger project, Te Kotahitanga, which found the relationship between teacher and student to be of crucial importance for Māori learners and that good teaching includes integrating cultural identity, rejecting deficit theorising, and taking responsibility for children's learning and understanding. Robinson et al finds when pedagogical leaders promote or participate in quality professional development in the school, the impact of teaching over all classes in the school can more than double. Biddulph et al find that effective home/school partnerships can significantly improve educational outcomes.

³ Ladd (2011) p 2; also see Dickerson & Popli (2012).

10. In New Zealand, this effect is seen in the *Competent Children, Competent Learners* longitudinal study, which began following 500 four year olds in 1993/4, of which 400 remained in the study at age 20. The study recently found that those without a school qualification at age 20 were more likely to have been in low-income homes or homes in financial difficulty at ages five and 14, and more likely to have mothers who had also left school without a qualification⁴.
11. The OECD's *Programme for International Student Assessment (PISA)* study showed that, when compared with 33 other OECD member countries in 2009, New Zealand had one of the largest differences in reading performance between low and high achievers. The relationship between SES and New Zealand's 15 year olds' reading performance was much stronger than the OECD average.
12. In 2011, 89 percent of school leavers from decile 9 and 10 schools had achieved NCEA level 2 or above, but only 57 percent of leavers from decile 1 and 2 schools⁵. This pattern starts well before the high school years⁶.
13. SES is not destiny, and what is true for groups is not necessarily true for individuals. Some children and young people from low SES backgrounds succeed in education. The *Competent Children, Competent Learners* report at age 20 found that "what teachers and parents do, their interaction with students and opportunities they provide children and early adolescents, do matter"⁷. This was consistent with the study's earlier reports⁸. A report of one United Kingdom longitudinal study went so far as to state that its findings showed that "what parents do is more important than who parents are"⁹.
14. Ethnicity and SES often appear closely linked. In New Zealand, Māori and Pasifika people are more likely to have lower SES, and Pākehā people to have higher SES. This is not because it is an inherent disadvantage or advantage to be part of a particular ethnic group, but because of the structurally inequitable distribution of income and education across our population. Having low levels of material resources and social capital is likely to be challenging for people from any ethnic group. Just over half of Māori school leavers in 2011 had achieved level 2 NCEA or above, less than the rate of either Pasifika or Pākehā.¹⁰

⁴ Wylie & Hodgen (2011). p 38. The *Competent Children, Competent Learners* study undersampled low SES children and was not designed as a nationally representative sample. However it still provides robust, longitudinal and local data that is valuable for policy making.

⁵ <http://www.educationcounts.govt.nz/indicators/main/education-and-learning-outcomes/1781>. Decile one schools are the 10 percent of schools with the highest proportion of students from low socio-economic communities, whereas decile ten school have the lowest. Decile ratings are assigned by the Ministry of Education based on census data.

⁶ See for example <http://www.educationcounts.govt.nz/indicators/main/education-and-learning-outcomes/748> and <http://www.educationcounts.govt.nz/indicators/data/education-and-learning-outcomes/3624>

⁷ Wylie & Hodgen (2011). p2

⁸ Wylie & Hipkins (2006).

⁹ Sylva et al (2004). Quote taken from p 1 of the associated Research Brief.

¹⁰ <http://www.educationcounts.govt.nz/indicators/main/education-and-learning-outcomes/1781>. Decile one schools are the 10 percent of schools with the highest proportion of students from low socio-economic communities, whereas decile ten school have the lowest. Decile ratings are assigned by the Ministry of Education based on census data.

15. Overall, it seems that we face a range of challenges to improve equity between children and young people from different backgrounds, but that we have some areas of strength we can build on. PISA tells us that New Zealand has:
- higher than average proportions of ‘resilient’ students (those who did better than predicted by their SES)
 - a relatively inclusive system (typically, students with a range of abilities are enrolled in our schools)
 - high levels of engagement in early literacy (as measured by parents’ reports of their involvement in early home-based reading literacy activities)¹¹.
16. Addressing the root causes of disadvantage is preferable to working out how to mitigate it. However, protective and remedial policies can and should be developed simultaneously. Finding out more about the mechanisms or pathways of change, and putting this information into practice are therefore important tasks for educational researchers and policy makers.

WHY FOCUS ON HOME, PARENTS, FAMILY AND WHĀNAU?

17. Most children and young people spend less than half their time in formal education settings. They spend the majority of their time in their homes, with families and whānau, and in their communities. Parents and whānau are generally among their most stable influences, and “children’s early development depends on the health and well-being of their parents¹²”.
18. Hattie’s 2009 synthesis of 800 meta-analyses related to educational success found the effect of the ‘home environment’ to be larger than inputs such as school and class size, and even quality of teaching¹³. Other research confirms this. To take one example, a Canadian study of 30,000 15 year olds found that student characteristics and family backgrounds were much more related to reading skill than were schooling characteristics. ‘Non-school factors’ accounted for over a third of the variance in reading achievement scores, while ‘school factors’ only accounted for a tiny amount¹⁴.
19. The impact of quality ECE on children’s later educational success is also very impressive. Mitchell (2008) provides information and analysis of the outcomes of ECE for readers seeking detailed evidence. Because of its known benefit, there is currently a strong focus on improving access to quality ECE, particularly for Māori and Pasifika children and those from lower SES backgrounds. This focus is positive.
20. A recent meta-analysis of 123 programmes found that participation in quality ECE can produce positive cognitive effects of the order of half the achievement gap between poor and non-poor children to the end of high school¹⁵. This is similar to the size of the effects found by other research when children started school:

¹¹ OECD (2009)

¹² Shonkoff & Phillips (2000) p 7

¹³ Hattie (2009) Appendix B

¹⁴ Frempong et al (2006) p 25. “Non-school factors” were female, non-immigrant, high SES, enjoyment of reading, student education expectation and family characteristics. These factors were found to be “equally important in accounting for original variation in reading achievement”.

¹⁵ Camilli et al (2010) reported in Barnett (2013)

“...multiple meta-analyses conducted over the past 25 years have found pre-school education to produce an average immediate effect of about half (0.5) a standard deviation on cognitive development. This is the equivalent of 7 or 8 points on an IQ test or a move from the 30th to the 50th percentile for achievement test scores. For social and emotional domains, estimated effects have been somewhat smaller but still practically meaningful, averaging about 0.33 standard deviations. To put these gains in perspective, it’s important to realise that on many measures, a half standard deviation is enough to reduce by half the school-readiness gap between children in poverty and the national average¹⁶.”

These findings, taken together, align with other evidence¹⁷ that the effects of quality ECE can persist over time.

21. Attitudinal competencies and learning dispositions are also increased by participation in quality ECE and have repeatedly been found to be extremely important to outcomes¹⁸.
22. Quality ECE benefits all children, so to address the needs of disadvantaged children, there is evidence that more service intensity (in terms of quality and duration) is needed to close the gap between them and their more advantaged peers¹⁹.
23. Effects relating to the interaction between home and ECE experiences also need to be considered. The main study to look at this interaction, the United Kingdom *Effective Provision of Pre-school Education* (EPPE) study, found that the children doing best in both cognitive and socio-behavioural domains, in both year six²⁰ and year nine²¹, had experienced both a high-quality early years home learning environment (HLE) and a highly effective ECE service. This finding has important implications for policy as it suggests that greater returns on the approximately \$1.5 billion Crown ECE expenditure could potentially be achieved by also focusing on home environments.
24. Simply put, participating in quality ECE will close some of the gap between more- and less-advantaged children. Improving both the home learning environments and rates of participation in quality ECE by disadvantaged children is likely to improve their outcomes more than focussing on either area on its own.
25. The gains from improving parent and whānau supports are not limited to learning outcomes for the individual child. Effective parent and whānau engagement in children’s learning has the potential to improve systemic provision by providing opportunities for ECE services, schools, and Government to learn more about what works in different communities.

¹⁶ Barnett (2008). An argument can be made that New Zealand ECE is more effective than the kind of ECE found overseas, and there is some evidence to support this. The PISA study found that the average score point difference that could be considered as resulting from pre-primary education was higher for New Zealand students than the OECD (after accounting for SES status). See OECD (2010) Vol II Figure II.5.9 p 97. Note that the students in PISA were 15 years old and therefore experienced ECE at least ten years ago, at which time ECE in New Zealand may have been lower quality than it is now owing to its lower proportion of qualified and registered teachers. However despite this I am not convinced that New Zealand ECE can close the attainment gap on its own.

¹⁷ Mitchell et al (2008).

¹⁸ Mitchell et al (2008), Wylie & Hodgen (2011).

¹⁹ Green & Mostafa (2011), Mitchell et al (2008). Sylva et al (2012) found that multiply-disadvantaged children benefitted most from the highest quality ECE.

²⁰ Sylva et al (2008).

²¹ Sylva et al (2012).

26. It is possible for Government to arrange policy settings for the education system so that it does more. For example, Shonkoff & Phillips (2000) report that early years programmes that “combine child-focused educational activities with explicit attention to parent-child interaction patterns and relationship building appear to have the greatest impacts²²”. Therefore a likely useful approach would be to provide disadvantaged children with services that include out-of-home ECE, home visiting and parent support, such as the Abecedarian model programme²³. In New Zealand, however, these components are generally separated and disadvantaged children do not necessarily access them all, or all simultaneously. Extending the *20 Hours ECE* provision currently available for over-three year olds to disadvantaged two year olds could also help.
27. In schooling, we could consider providing more educational school holiday programmes, changing teacher education, or extending the school day. Many things are possible (and do-able), depending on political and social priorities and preferences. However, this paper provides evidence that focussing *only* on the formal education system misses opportunities to better respond to the challenge before us. Yes, for Māori, Pasifika and low SES children and young people in particular, the education system could, and should, be improved but it is not the only lever that should be attended to.
28. The rest of this paper looks at what parents, families, whānau and communities can contribute to their children’s learning and how they can be better supported.
29. My key message is that parents, caregivers, families, whānau and communities can make a big, positive, difference to children’s learning and education success, whatever their resources and circumstances, and that systems and policies can make their job either easier or more difficult.

UNDERSTANDING THE CONTRIBUTION OF PARENTS AND WHĀNAU TO LEARNING

30. Discussion of the elements of parents’, families’ and whānau contributions to children’s learning follows under three headings:
 1. parent circumstances
 2. parent attitudes and values
 3. parent investments and behaviours.
31. The paper’s focus is on the elements most amenable to change in the short to medium term, and that can overcome disadvantage by conferring protective benefits or improving children’s and young people’s resilience.

PARENT CIRCUMSTANCES

32. Some parent circumstances, especially having a high level of education and income prior to becoming a parent, and in the child’s early years, are highly correlated with the child’s success in all domains. A good example of their impact is this finding from the *Competent Children, Competent Learners* report at age 20:

²² Shonkoff & Phillips (2000). p 11.

²³ ECE Taskforce (2011). Brooks-Gunn et al (2005).

“ ...Those without a school qualification constituted seven percent of the study age-20 sample, yet they were well overrepresented among those whose family financial situation had been difficult at age 14 (they constituted 23% of this group), or who had had low family income when they were aged near-5. They were also overrepresented among those whose mothers had also left school without a qualification (they constituted 14% of this group), and among Māori or Pasifika (constituting 14% of this group)²⁴.”

33. As mentioned, SES categorisation usually includes measures of both household income levels and parents' education levels. These factors have separate, large, effects on children's outcomes. There is extensive evidence that low income, especially if persistent or experienced in the early years, has a negative effect on cognitive development²⁵. There is also literature on the mechanisms by which low income affects child development, including home environment and parent behaviours (e.g. ability to provide cognitive stimulation and levels of mental distress)²⁶. It is also well-evidenced that a mother's education has a strong impact on children's educational success and cognitive development²⁷, and a number of studies have found parental education levels to have stronger effects on educational outcomes than direct income effects²⁸.
34. This is a complex area because of the inter-relationship between income and education. It is sufficient to note that both income and parental education levels are very important for children's outcomes, especially in the early years. Level of education makes a major contribution to a person's income²⁹, so emphasising the distinction between the two may seem pedantic. However it becomes pertinent when policies and actions are being developed to address poverty and educational disadvantage, because it indicates that simply addressing *either* income *or* parents' education levels would be unlikely to fully and permanently close the gap in educational outcomes between advantaged and disadvantaged children and young people.
35. The impacts of circumstances on parenting are important, but effectively changing them is a medium- to long-term task. There is also good evidence that parents' behaviours and attitudes are very powerful, and these are not necessarily linked to their circumstances and backgrounds³⁰.

²⁴ Wylie & Hodgen (2011). p 38.

²⁵ Linver et al (2004) and Dickerson & Popli (2012) summarise this.

²⁶ Gregg et al (2007), Berger et al (2009), Dickerson & Popli (2012).

²⁷ Dickerson & Popli (2012).

²⁸ Wylie & Hipkins (2006), Nasim (2010), Wylie & Hodgen (2011), Sylva et al (2012).

²⁹ Kruger & Lindahl (2001), Nasim (2010.)

³⁰ Sylva et al (2004) found that what parents do matters more than who they are. Similarly, Berger et al (2009), using a different country's longitudinal data set and looking at 3 year olds, found that "if measured well, the home environment can fully explain the difference in outcomes between low-income and higher-income children" (p 988). Note that this is not an uncontroversial point. Dickerson & Popli (2012), using data from a longitudinal study in the same country as Sylva et al's study, found that although positive (and negative) parenting activities like reading (and shouting) had effects, they were not as large as the effects of poverty and maternal education.

PARENT ATTITUDES AND VALUES

36. Parents' attitudes to their children's likely educational success have consistently been found to be very powerful. A New Zealand synthesis found that "regardless of ethnic or SES background, families with high levels of educational expectations have the most positive effects on their children's achievement at senior school levels."³¹
37. The *Progress in International Reading Literacy (PIRLS)* study³² also found that the average reading score of students with parents who reported that they expected their child to gain a tertiary educational qualification was significantly higher than their peers whose parents considered their child would not achieve this level of educational success. This is an important finding, both because of its size and its apparent persistence³³. PISA found that students whose parents reported valuing reading themselves had significantly better scores compared to their peers³⁴.
38. The *Competent Children, Competent Learners* study found that students who were high performers at age 14 despite early low income were twice as likely to have had parents who reported expectations that their eight year olds would attend university in the future³⁵. Another study found that, with regard to reading success, "family resources, possessions and activities are much less important than expectations, supports and interests"³⁶.
39. Expectations and beliefs run in both directions. Telford (2012) writes that
"... It is essential that parent/whānau involvement be a positive experience: it is important that parents and whānau hold positive beliefs about their child's potential, and that their child's skill and motivational development are nurtured and enabled. If parents and whānau hold negative beliefs and their involvement is control-based and person-focused, home involvement is likely to have a detrimental effect on children's learning"³⁷.
40. The importance of their own attitudes to educational success of young adults - former children and future parents - is also evidenced. A United Kingdom study found that increases in 14 year olds' beliefs in their own abilities were associated with increases in their educational success at 16³⁸.

PARENT INVESTMENTS AND BEHAVIOURS

41. Parents and whānau make a wide range of investments in their children, including material possessions and social capital. A normal birth weight is important³⁹, as is being kept safe, housed, and fed. Investments in some other material possessions also have impacts: for example, the number of books in the home has been associated with educational outcomes numerous times⁴⁰.

³¹ Biddulph et al (2003). p iv

³² International Association for the Evaluation of Educational Achievement (2012).

³³ International Association for the Evaluation of Educational Achievement (2012). p 117.

³⁴ Telford (2012).

³⁵ Wylie & Hipkins (2006).

³⁶ Frempong et al (2003). p 27.

³⁷ Telford (2012). p 13.

³⁸ Nasim (2010).

³⁹ Hattie (2009).

⁴⁰ International Association for the Evaluation of Educational Achievement (2012), Nasim (2010).

42. The choice to access quality ECE is a parental behaviour or investment and it is one that the majority of parents in New Zealand make. There is a definite and long-standing pattern where Māori, Pasifika and children from lower SES backgrounds participate in ECE at lower rates⁴¹.
43. Parenting style is also important. A lot of research has been done using Baumrind's typology of parenting styles: authoritarian, authoritative, permissive, and uninvolved⁴². Authoritative parenting, which sets rules and boundaries, but is supportive, warm and responsive, is consistently associated with better development and educational achievement⁴³. Part of parenting is the provision of an environment in which learning can occur: an early learning environment. This term refers to the environment in which all learning experiences in the years from birth to eight happen. It therefore encompasses both formal education and the informal learning experiences that happen in the home environment and with family, whānau and community.
44. The quality of the home environment and the level of cognitive stimulation children receive especially in their early years have been studied repeatedly and found to be important:

“Dozens of studies in the US, Australia, Canada, England and elsewhere show that the home environment powerfully influences what children and youth learn within and outside school. This environment is considerably more powerful than the parents’ income and education in influencing what children learn in the first six years of life and during the 12 years of primary and secondary education.”⁴⁴”

45. The *Effective Provision of Preschool Education* (EPPE) longitudinal study⁴⁵ developed an index to measure the quality of the home learning environment (HLE). This term is used here to refer specifically to the interactions between parents and children that lead to learning. The index consisted of:
- reading together
 - teaching songs and nursery rhymes
 - painting and drawing
 - playing with letters and numbers
 - visiting the library
 - teaching the alphabet and numbers
 - taking children on visits and creating regular opportunities for them to play with their friends at home.

46. The study found that the HLE was an important predictor of education success. Importantly, the study (reporting when the children were age 11) found that:

“...while other family factors such as parents’ education and SES are also important, the extent of the early years HLE exerts a greater and independent influence on educational attainment...the early years HLE is only moderately associated with SES and parents’ educational levels, indicating that low SES homes

⁴¹ See <http://www.educationcounts.govt.nz/indicators/main/student-engagement-participation/1923> for more information

⁴² Baumrind (1967).

⁴³ O'Connor et al (2007).

⁴⁴ Wahlberg (1999), cited in Biddulph et al (2003), p 143.

⁴⁵ Sylva et al (2008).

sometimes score highly and, conversely, high SES homes sometimes score poorly...⁴⁶."

47. This effect seems long-lasting: the study findings when the children aged 14 found those who had experienced a high HLE were between 1 and 1.3 curriculum levels (in different school subjects) ahead of those who had experienced a low HLE, and were rated more positively on socio-behavioural outcomes by their teachers⁴⁷.
48. The PIRLS study⁴⁸ uses an early literacy activities scale, consisting of the following items:
 - reading books
 - telling stories
 - singing songs
 - playing with alphabet toys
 - talking about things done
 - talking about things read
 - playing word games
 - writing letters or words
 - reading aloud signs and labels.
49. Students whose parents reported they had often participated in these types of activities with their child before they began school achieved a significantly better reading results than students whose parents never or almost never did. This positive effect of participating in early home-based literacy activities was also found in previous PIRLS phases.
50. The PISA study uses a similar early literacy scale as PIRLS, but looks at older students. PISA found that not only does parents' engagement in educational activities with their children just as they start school show a strong relationship to 15 year old reading performance, but the type of activity matters. Students whose parents reported they '*frequently talked about things they had done, wrote letters and words, and read signs and labels aloud*' had an increase in reading performance that was almost equivalent to a year of schooling. Being read to at least once a week was even more powerful in terms of score points at well over a year's equivalent⁴⁹.
51. Even after accounting for SES, the average score advantage for students who were regularly read to was more than equivalent to one year of schooling. The effect is not only seen at young ages – parents having discussions with their 15 year olds about topical issues was also found to be related to better performance in PISA⁵⁰.
52. There are also similar findings about the importance of spoken language. A major United States study⁵¹ found significant differences in the amount of talk one to three year olds heard. Some parents spent 40 minutes out of 60 interacting with their children, and others 15. Some said more than 3,000 words per hour and others less than 500. The researchers found that

⁴⁶ Sylva et al (2008). p 22.

⁴⁷ Sylva et al (2012). p 29 & p 49.

⁴⁸ International Association for the Evaluation of Educational Achievement (2012).

⁴⁹ Telford (2012). p 12.

⁵⁰ OECD (2012).

⁵¹ Hart & Risely (1995).

exposure to language was linked to the children's language and cognitive development at age three, and their language use at age three predicted language skill (including reading) at age nine/ten.

53. The importance of parents' behaviours is seen in longitudinal data as well. Berger et al's (2009) analysis⁵² of the United States Fragile Families dataset found that the quality of the home environment (measured by 17 variables including parenting, maternal mental health and the physical environment) could explain the difference in achievement between low- and high-income children. Dickerson and Popli's (2004) analysis⁵³ of the United Kingdom Millennium Study dataset found that the inclusion of parenting variables reduced (although not completely) the impact of low income on children's outcomes.
54. There is also research on how parenting can mitigate the effects of low income. Linver et al analysed two large American data sets (Infant Health and Development Program and Panel Study of Income Dynamics – Child Development Supplement). They hypothesised that low income has an effect through two different channels: the parent investment model (resources allow parents to invest in their children) and the family stress model (low levels of resources cause stress that reduces the quality of parenting). They found that parenting practices could help reduce the known negative effect of low income on behaviour, and a stimulating home environment can reduce the known negative effect of low income on both behaviour and achievement⁵⁴.
55. Parental engagement in learning is also known to be extremely powerful, especially when parents and teachers work together in partnership for the express purpose of supporting a child's learning, and when parents actively support their child's learning at home. Parental involvement in activities that take place in schools and ECE services, but are not directly linked to their child's learning, is less effective (although still potentially of value)⁵⁵.
56. An evaluation by the Education Review Office (ERO)⁵⁶ of parent engagement in New Zealand schools summarised the international literature as follows:
 - Effective partnerships between parents, whānau and families, communities, and schools lead to improved educational, social, and behavioural outcomes.
 - The most effective partnerships are where all parties construct and share common visions and goals.
 - Programmes that engage whānau and families in supporting learning at home are linked to higher student achievement.
 - Parents, whānau and families initially become involved in activities that directly affect their own children but can be drawn into wider school activities.
 - Parents from economically disadvantaged and/or ethnic minority groups are the least likely to become involved in school activities.

⁵² Berger et al (2009)

⁵³ Dickerson & Popli (2012)

⁵⁴ Linver et al (2004) p 34

⁵⁵ Harris & Goodall (2007), and acknowledged in the Government's strategies for Maori and Pasifika education, Ka Hikitia and the Pasifika Education Plan

⁵⁶ ERO (2008) p 14

- The extent to which parents become involved is influenced by their own schooling experiences and their perception of the school's culture and willingness to accept their contributions non-judgementally⁵⁷.
57. Engagement is important in both the pre-school and school years. A recent small New Zealand study found that children who participated in 'parent mentoring playgroups' prior to starting school did better on literacy measures at age six than did comparison children who participated in other types of ECE or who had no ECE experience. (No difference in literacy was found at age five, and no effects for numeracy were found).
 58. The playgroups were held on school premises; required parents to attend with their children; fostered a positive relationship between parents and the school; provided a structured learning environment with a focus on school readiness; and provided information and resources for parents to support their child's learning at home.
 59. The literacy finding was statistically significant at age six, but not at age seven⁵⁸. However given findings of the *Competent Children, Competent Learners* study⁵⁹ that the first year of school appears to be particularly important for children from low income homes, this finding has implications for policy.
 60. Longitudinal research has also found that parental engagement in primary school is correlated with children's lower high-school dropout rates⁶⁰. This is important because every additional year spent in high school increases the young person's later income⁶¹.
 61. ERO's evaluation of New Zealand practice found that

"... Where schools were engaging with parents and communities, it was not just the actions taken but the spirit in which they acted that influenced the quality and success of this engagement. Six key factors emerged from this evaluation that underpinned effective engagement:

 - *Leadership*
 - *Relationships in the school community*
 - *School culture*
 - *Partnerships with parents and families*
 - *Community networks*
 - *Communication"*
 62. Parents from all SES backgrounds can behave in the ways described in this section. However the policy and social environment in which they live can make these behaviours easier, or more difficult; more likely, or less likely. High-level policy settings clearly have a role in creating an environment within which parents, families, whānau and communities can function optimally. The way ECE services and schools work with families is also important.

⁵⁷ ERO (2008). pp 5-6.

⁵⁸ Widdowson & Dixon (2011).

⁵⁹ Wylie & Hipkins (2006).

⁶⁰ Barnard (2004).

⁶¹ Krueger & Lindahl (2001).

SUPPORTING THE CONTRIBUTION OF PARENTS, FAMILIES AND WHĀNAU

63. Supporting all parents to act in ways that improve their children's learning should be a key goal of communities and government. An increased focus is needed to best determine how we might generate better outcomes for children and young people by supporting positive parental behaviours, attitudes and values.
64. A reasonable approach would start early in the life of the child; be strengths-based and recognise the expertise of parents and whānau; build on what is already known to work; and maintain a consistent focus over time.

START EARLY

65. Effective approaches should focus first on the parents of the youngest children. Neurobiological evidence⁶² and human capital theory⁶³ both show that the early years are very important for establishing future developmental potential, and provide a framework for the wealth of evidence discussed above. While this potential is not fixed, a basic principle of early intervention is that it becomes more difficult to effect a desired state as the child, or situation, ages⁶⁴. Childhood competencies affect later educational outcomes and adult competences⁶⁵. In New Zealand, the *Competent Children, Competent Learners* study found a reasonable level of consistency on most cognitive competencies measured between the ages of 8 and 16⁶⁶.
66. Elements of this approach would address a range of perinatal and early years opportunities to strengthen parental engagement in learning and support a positive home learning environment, including efforts to improve attachment, address parental (especially maternal) mental health issues, and encourage parents to talk, sing and read to babies.

WORK WITH FAMILIES AND WHĀNAU AS EXPERTS

67. Raising children is primarily the responsibility of parents and families. Focussing policy on what happens in homes can be an opportunity to improve educational outcomes, if it is done in partnership and in ways that build on families' strengths and knowledge, and add to their existing practices. Blaming or judging parents and whānau for their children's educational 'failure', and diminishing what they know and do, will not improve outcomes⁶⁷.
68. Mason Durie made the following point with respect to Māori whānau, but it is likely to have application to other families as well:

"A primary whānau role is the transmission of culture, knowledge, values and skills....the shaping of language, values, and cultural world view is a fundamental whānau function. The fact that it is not always well executed does not reduce the expectation that whānau will be the primary carriers of culture, whānau

⁶² Shonkoff & Phillips (2000), Center on the Developing Child at Harvard University (2007).

⁶³ Cunha & Heckman (2007).

⁶⁴ Shonkoff & Phillips (2000).

⁶⁵ Linver et al (2004), Nasim (2010).

⁶⁶ Wylie & Hodgen (2007). p 15.

⁶⁷ Biddulph et al (2003).

knowledge, human values and life skills and in that sense will themselves exercise an important educational role⁶⁸.”

69. A focus on helping parents and whānau to help their children succeed is therefore complementary to efforts to improve the institutional education system. A balance needs to be struck that supports parents to maximise the home learning environment while also recognising their expertise. A useful approach might be to find areas of children’s lives in which parents are already very involved, and build on those attitudes and behaviours.

BUILD ON WHAT IS ALREADY KNOWN

70. We already know many elements of parenting that support children to have good outcomes, including achieving in education, much of which is discussed above.
71. There is also some evidence about why some children and young people do better than they had been expected to. The *Competent Children, Competent Learners* study found that there were some factors that were highly correlated with educational success over and above parents’ education and income. These included enjoying reading, being curious and having perseverance at earlier ages, and having internal markers of achievement⁶⁹.
72. The study also conducted an analysis on the 122 children in the sample who had early low income, to try to identify why some of them were achieving academic success at 14 despite this disadvantage⁷⁰. High achievers were more likely to have:
- higher levels of maternal education
 - household incomes that had improved since they were age five
 - more stable housing
 - attended higher-quality ECE services.
73. Many of these items fall into the category of ‘parent circumstances’. However, the children also had a range of characteristics that could reasonably be considered outcomes of parents’ behaviours and attitudes. For example, they were more likely to:
- enjoy reading, use the library, keep a diary and write songs or poems
 - share their experiences with their parents
 - have positive relationships with peers
 - be engaged in school
 - spend more time on homework.
74. The EPPSE study’s⁷¹ report of the stage of the study when the children were 14 found that those who ‘succeeded against the odds’ had parents who:
- valued learning
 - provided emotional support and had high aspirations
 - were resilient themselves

⁶⁸ Durie (2006). p 7.

⁶⁹ Wylie & Hipkins (2006).

⁷⁰ Wylie & Hipkins (2006).

⁷¹ Sylva et al (2012). As it subjects aged, EPPE was re-named the *Effective Pre-school, Primary and Secondary Education* project

- encouraged extra-curricular activities for learning (not just fun)
- recognised that ECE had value beyond simply ‘preparing children for school’.

These children also received support with school or learning from friends and the community.

75. It is likely that many communities in New Zealand know what is working (or not working) for their children and young people. Collecting and assessing this evidence would be a valuable use of research resources. Overseas studies have found that parents vary in how they read, talk, and engage with their children, so this might also be the case in New Zealand⁷². This would also be an interesting question for further research.

MAINTAIN FOCUS

76. As noted, principles of early intervention suggest an early focus. However human capital theory emphasises the importance of building on earlier stages. For example, following a high-quality start in early learning with a poor-quality educational experience in middle childhood would reduce the returns on that earlier investment⁷³.
77. The *Competent Children, Competent Learners* study⁷⁴ found that some of the children who at age five were in homes with low incomes had begun school well and were achieving at age eight, but had lost ground by age 14. At 16, young people who had been in low income homes and had mothers with few qualifications were more likely to have had decreasing scores on both cognitive and attitudinal competencies, than those who had been in higher income homes and had mothers with higher qualifications⁷⁵. A similar effect is seen in United Kingdom studies looking at younger children⁷⁶. These findings have important implications for policy.
78. The role of parents, caregivers, family and whānau, and of the home learning environment, need to be considered alongside children’s development and progression through the education system.

CONCLUSION

79. Poverty and disadvantage diminish and waste potential and serious measures to address them need to be taken. However as the EPPSE study found:

“... There is no ‘one’ predictor which explains attainment, progress and development, but rather it is the combination of factors that makes a difference to young people’s long-term life chances. The message for policy is that there is no magic bullet because addressing one area in isolation is unlikely to have a strong impact on narrowing the gap⁷⁷.”

⁷² Brooks-Gunn & Markham (2005) and Hart & Risely (1995).

⁷³ See Cunha & Heckman for a discussion of this effect.

⁷⁴ Wylie & Hipkins (2006).

⁷⁵ Wylie & Hodgen (2007).

⁷⁶ Nasim (2010). pp 40- 41.

⁷⁷ Sylva et al (2012). Quote is taken from the associated Research Brief, p 9. The ‘disadvantages’ counted included maternal qualification, parents’ employment status, being the child of a lone mother, birth weight, family size and low HLE. Income was not explicitly included, but it seems very unlikely that a family with the above characteristics would not be low income. Disadvantages are listed in Appendix B to the main paper.

80. Parents and whānau contribute some of the factors that lead to educational success, and educational settings and Government policies contribute others. There are therefore powerful opportunities for partnership.
81. This paper has described parenting attitudes and behaviours that have major impacts on developmental and educational outcomes, like talking and reading together, positive attitudes and high expectations, and engaging in children and young people's learning in ECE and school.
82. The scale of these impacts suggest that bringing greater focus to the role of home, parents, family and whānau in learning offers an opportunity to better support all New Zealand children and young people to achieve their educational potential. However it would be unreasonable to expect parents, families and whānau to overcome significant, multiple disadvantages by (for example) reading to their child. To achieve the levels of benefits described above, for *all* our children and young people, it is likely that a range of universal and targeted policies and services are needed. Strategies and system policy settings can create an environment that enables parents, caregivers, families and whānau to operate optimally: for example, by providing adequate income, housing and health support. For some parents, caregivers, families and whānau, explicit support to promote children's learning is also likely to be beneficial.

BIBLIOGRAPHY

- Alton-Lee, A. (2003). *Best Evidence Synthesis - Quality Teaching for Diverse Learners*, Wellington: Ministry of Education.
- Barnard, W.M. (2004). Parent involvement in elementary school and educational attainment. *Child and Youth Services Review* 26:39-62.
- Barnett, W.S. (2008). *Preschool Education and Its Lasting Effects: Research and Policy Implications*. Boulder and Tempe: Education and the Public Interest Center and Education Policy Research Unit.
- Barnett, W.S. (2013). *Policy Report: Getting the Facts Right on Pre-K and the President's Pre-K Proposal*. National Institute for Early Education Research.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behaviour. *Genetic Psychology Monographs*, 75(1), 43-88.
- Berger, L.M., Paxson, C., & Waldfogel, J. (2009). Income and child development. *Children and Youth Services Review* 31 pp 978-989.
- Biddulph, F., Biddulph, J., & Biddulph, C. (2003). *Best Evidence Synthesis - The Complexity of Community and Family Influences on Children's Achievement in New Zealand*, Wellington: Ministry of Education.
- Bishop, R. & Berryman, M. (2009). *The Te Kotahitanga Effective Teaching Profile*. SET 2. Wellington: New Zealand Council for Educational Research.
- Brooks-Gunn, J., & Markham, L.B. (2005). The contribution of parenting to ethnic and racial gaps in school readiness. *The Future of Children* Vol 15 No 1 pp 139-168.
- Camilli, G., Vargas, S., & Ryan, W.S. (2010). Meta-analysis of the effects of early education interventions on cognitive and social development. *Teachers College Record*, 112(3), 579-620.
- Cunha, F. & Heckman, J. (2007). The Technology of Skill Formation, *American Economic Review*, American Economic Association, vol. 97(2), pages 31-47, May.
- Desforges, C. and Abouchard, A. (2003). *The Impact of Parental involvement, Parental Support and Family Education on Pupil Achievements and Adjustment: A Literature Review*. Research Report RR433, U.K. Department for Education and Skills.
- Dickerson, A. & Popli, G. (2012). *Persistent poverty and children's cognitive development. Evidence from the UK Millennium Cohort Study*. Working paper 2012/2. Institute of Education University of London: Centre for Longitudinal Studies.
- Durie, M. (2006). *Whānau , education and Māori potential*. Paper to Hui Taumata Mātauranga
- ECE Taskforce (2011). *Research Summary* <http://www.taskforce.ece.govt.nz/wp-content/uploads/2010/11/2-Research-Summary.pdf>
- Education Review Office (2008). *Partners in Learning: Schools' Engagement with Parents, Whānau and Communities*. Wellington. Education Review Office.
- Entwisle, D.R., Alexander, K.L., & Olson, L.S. (2004). "Young children's achievement in school and socioeconomic background. In *After the Bell – Family Background, Public Policy, and Educational Success*. Ed Conley, D., and Albright, K. Routledge Advances in Sociology, London & NY: Routledge. pp 86-108.
- Frempong, G., Ma, X., & Achampong, E. (2006). *Improving Reading Skills: Policy Sensitive Non-School and Family Factors: Final Report*. Human Resources Skills and Development Canada.
- Green, A. & Mostafa, T. (2011). *Pre-School Education and Care - a 'Win-Win' Policy?* published by the Centre for Learning and Life Chances in Knowledge Economies and Societies at: <http://www.llakes.org>
- Gregg, P., Propper, C., & Washbrook, E. (2007). *Understanding the relationship between parental income and multiple child outcomes: A decomposition analysis*. Research Paper No. CASE 129. Centre for Analysis of Social Exclusion, London School of Economics,
- Hart, B. & Risely, T.R. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore: Paul H. Brookes.
- Hattie, J. (2009). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. Abingdon, Oxon: Routledge.

- Harris, A. & Goodall, J. (2007) *Engaging parents in raising achievement – do parents know they matter?* Research Report DCSF-RW004. London: Department for Children, Schools and Families.
- Heckman, J. J. & Masterov, D. V. (2004). *The productivity argument for investing in young children*. New York, NY: Committee for Economic Development; Cunha, F. & Heckman, J. J. (2007). *The Technology of Skill Formation*. National Bureau of Economic Research Working Paper 12840.
- International Association for the Evaluation of Educational Achievement (2012). *PIRLS 2011 International Results in Reading* Lynch School of Education, Boston College.
- Karoly, L. A., Kilburn, M. R. & Cannon, J. S. (2005). *Early Childhood Interventions: Proven Results, Future Promise*. Santa Monica, CA: RAND Corporation.
- Krueger, A B. & Lindahl, M., (2001). Education for Growth: Why and for Whom? *Journal of Economic Literature*, 39 (4) 1101-1137.
- Ladd, H. (2011). *Education and Poverty: Confronting the Evidence*. Working Paper Series SAN 11-01, Duke Sanford School of Public Policy.
- Linver, M.R, Fuligni, A.S. & Brooks-Gunn, J. (2004). "How do parents matter? Income interactions and intervention during early childhood" In *After the Bell – Family Background, Public Policy and Educational Success*. Ed Conley, D and Albright, K. Routledge Advances in Sociology. Routledge: London and NY 2004 pp 25-50.
- Mitchell, L., Wylie, C. & Carr, M. (2008). *Outcomes of Early Childhood Education: A Literature Review*. Wellington: Ministry of Education.
- Nasim, B. (2010). *The Interdependence and Determinants of Childhood Outcomes: The Relevance for Policy*. CEE Special Report 003. Report to the Department of Children, Schools and Families. London School of Economics: Centre for the Economics of Education.
- O'Connor, T.G. & Scott, S. B. C. (2007). *Parenting and Outcomes for Children*. The Joseph Rowntree Foundation.
- OECD (2010). *PISA 2009 Results: Overcoming Social Background – Volume II*. OECD.
- Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School Leadership and Student Outcomes: Identifying What Works and Why Best Evidence Synthesis*. Wellington: Ministry of Education.
- Sammons, P., Sylva, K., Melhuish, E.C., Siraj-Blatchford, I., Taggart, B., Grabbe, Y. & Barreau, S. (2007a). *The Effective Pre-School and Primary Education 3-11 Project (EPPE 3-11): Influences on Children's Attainment and Progress in Key Stage 2: Cognitive Outcomes in Year 5*. London: DfES / Institute of Education, University of London.
- Sammons, P., Sylva, K., Melhuish, E.C., Siraj-Blatchford, I., Taggart, B., Barreau, S. & Grabbe, Y. (2007b). *The Effective Pre-School and Primary Education 3-11 Project (EPPE 3-11): Influences on Children's Development and Progress in Key Stage 2: Social/ behavioural outcomes in Year 5*. London: DCSF / Institute of Education, University of London.
- Sylva, K., Melhuish, E.C., Sammons, P., Siraj-Blatchford, I. & Taggart, B. (2004). *The Effective Provision of Pre-School Education (EPPE) Project: The Final Report: Effective Pre-School Education*. London: DfES / Institute of Education, University of London. Quote taken from p 1 of the associated Research Brief.
- Sylva, K., Melhuish, E.C., Sammons, P. Siraj-Blatchford, I. & Taggart, B. (2008). *Final Report from the Primary Phase: Pre-school, School and Family Influences on Children's Development during Key Stage 2 (7-11)*. Nottingham: DCSF Research Report 61 / Institute of Education, University of London.
- Sylva, K., Melhuish, E.C., Sammons, P., Siraj-Blatchford, I. & Taggart, B. (2012). *Effective Pre-school, Primary and Secondary Education 3-14 Project (EPPSE 3-14) - Final Report from the Key Stage 3 Phase: Influences on Students' Development from age 11-14*. U.K. Department for Education Research Report 202.
- Shonkoff, J. P. & Phillips, D. A. (2000). *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington DC: National Academy Press.
- Center on the Developing Child at Harvard University (2007). *A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children*. <http://www.developingchild.harvard.edu>
- Telford, M. (2012). *Reading to learn: New Zealand 15-year-olds' reading habits, learning approaches and experiences of teaching practice*. Wellington: Ministry of Education.
- Wylie, C. & Hipkins, R. (2006). *Growing Independence: Competent Learners @14*. Wellington: New Zealand Council for Educational Research. Report prepared for the Ministry of Education.
- Wylie, C. & Hodgen, E. (2007). *Competent Learners @16: Competency levels and development over time*. Wellington: New Zealand Council for Educational Research. Report prepared for the Ministry of Education.

Widdowson, D. & Dixon, R. (2011). *Final Report for the Evaluation of the Parent Mentoring Project in Manukau*. Auckland: Centre for Child and Family Research, The University of Auckland. Report prepared for the Ministry of Education.

Wylie, C. & Hodgen, E. (2011). *Forming Adulthood: past, present and future in the experiences and views of the Competent Learners @ 20*. Wellington: New Zealand Council for Educational Research.