Working Paper no.16:
Education Solutions to Mitigate Child Poverty

Expert Advisory Group on Solutions to Child Poverty

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Purpose

1. Education plays an important role in mitigating the effects of child poverty and reducing poverty in the longer term. The purpose of this paper is to present recommendations to Government for what early childhood education and compulsory education can do to ensure that children's basic needs are met and provide the resources necessary to enable children and young people in poverty to achieve educational and career success. The recommendations are based on the international and New Zealand evidence.

2. This paper has informed the direction and recommendations of the EAG's *Solutions to Child Poverty in New Zealand: Issues and Options Paper for Consultation*. These are preliminary findings. A final report will be published in December 2012. The findings in this paper do not necessarily represent the individual views of all EAG members.

3. The EAG wish to acknowledge the Secretariat and EAG members for their work on this report.

Introduction

4. Children living in poverty can be disadvantaged in a variety of ways, from the lack of adequate basic needs being met to environmental and social factors that make it difficult for some children to participate fully in their education. These disadvantages directly affect children's educational achievement and successful transition to adult life.

5. Early childhood education programmes, schools, and tertiary pathways can mitigate the effects of child poverty and disadvantage, leading to reduced child poverty in the next generation. When students achieve educationally, they bring more skills to the labour market, strengthening their earning potential over their working lives.

6. The Government's commitment to improving student educational achievement and, as such, their life chances, is demonstrated in the recently announced targets to provide Better Public Services. The EAG endorses the following targets which aim to increase student achievement:

- Increasing participation in early childhood education (ECE). Increasing the rate of participation in early childhood education to 98 percent by 2016, from 94.7 percent currently.
- Increase the percentage of 18-year-olds with NCEA Level 2 or equivalent qualification. Increase the proportion of 18-year-olds with NCEA Level 2 to 85 percent by 2017, up from around 68 percent.
- Increase the percentage of 25-34 year olds with NCEA level 4 or above qualification from 52 percent to 55 percent by 2017.

7. Given the Government's focus on student achievement, the EAG recommendations focus on what the education sector can do to mitigate the effects of poverty on children. The EAG has identified this as a potential gap in policy thinking and as an opportunity to improve outcomes for children in poverty.

The role of early childhood education in mitigating the effects of child poverty

8. Early childhood education (ECE) plays an important role in mitigating the effects of child poverty. Evaluations of ECE programmes that serve children and families from low income and disadvantaged backgrounds identify the primary benefits of ECE. ECE can:

- support parents to increase their parenting skills and knowledge
- identify and address child social and behavioural problems
- prepare children to enter school 'ready to learn'
- serve as community 'hubs' where families receive services and develop positive social networks.

9. <u>Children who are socially and economically disadvantaged have the most to gain from participating in good quality ECE in terms of their cognitive and social-emotional development.</u> Intervention studies targeting children from low-income families that combined good quality ECE with parenting support and education were found to have positive impacts on children's cognitive growth, school performance, and long-term outcomes (Karoly, et. al, 2005).

10. The Early Childhood Education Taskforce was established in 2010 to provide recommendations on how to raise the quality of early childhood education in New Zealand and ensure that all children have access to appropriate high quality ECE. The Taskforce's final report, *An Agenda for Amazing Children*, provides a comprehensive analysis of the economic and social benefits of quality ECE together with a range of recommendations to improve the quality of ECE (2011).

11. The report provides a summary of the long-term cost benefits of quality early childhood education. Benefits include maternal employment, reduced special education services, less justice system involvement, reduced use of social services, and higher lifetime earnings. Effective programmes were relatively intensive, children attended at least one full year and most attended longer, and most services worked with parents as well as children. Programmes employed highly qualified teachers, with low child-to-teacher ratios and small class sizes. While the investment in the programmes was significant, cost-benefit analyses found that for every dollar invested, resulting returns ranged from $3 to $16.The table below summarises the long-term cost to benefit ratios for these programmes.

Table: Cost-to-benefit ratios found in major early childhood education programmes

(**Note** that these programmes are from the United States. No cost-benefit analysis has been conducted into early childhood education in New Zealand.)

Programme	Age at last follow-up	Benefits Cost ratio
Caroline Abecedarian Project*	21	3.23
Chicago Child-Parent Centres*	21	7.14
Chicago Child-Parent Centers[10]	26	10.83
Perry Pre-school* (excluding intangible crime costs)	27	5.15
Perry Pre-school* (including intangible crime costs)	27	8.74
Perry Pre-school*	40	16.14[11]

Source: ECE Taskforce Final Report (p. 22, 2011; adapted from Karoly, et. al., 2005).

12. The Taskforce Report highlights two especially important findings from the research. First, children who attended high quality ECE with planned programmes were generally better prepared for school, indicating that investments in ECE lay the foundation on which children can build stable knowledge and skill frameworks which will be used throughout their lives. Second, the reverse is also true. Children who do not participate in quality ECE are likely to start school without that foundation and may not be able to catch up with their peers. This disadvantage may affect them throughout their lives.

Early childhood education in New Zealand

13. Early childhood services in New Zealand include: <u>Playcentre</u> (Birth to school age), Kindergarten (Ages 3 – 5), Kohanga Reo, Early Childhood and Care services (Ages 0 – 5) (usually privately owned), Home-based services, Casual Education and Care services, Hospital-based services, and certificated groups (mainly playgroups). The quality of these options and distribution across communities vary.

14. The number of ECE services increased by 14.6 percent between 2001 and 2006. In recent years, more New Zealand children are spending longer hours in licensed ECE (20.1 hours per week in 2010, up from 16.6 hours in 2006). Moreover, the greatest increase in out-of-home care has been among children one year and younger (ECE Taskforce, 2011). These changes highlight the importance of providing high quality ECE.

15. The increase in out-of-home care for infants brings opportunities and risks. Quality programmes for infants include strong parent participation components. These programmes provide opportunities for parents living in isolation and those living in poverty and disadvantage to develop positive social networks, learn about child development and increase their parenting skills and confidence, and gain an understanding of the benefits of early childhood education and schooling. There are also opportunities to find out about community resources that may help them access health, social services, and career resources.

16. However, parents working full time, especially solo parents, may not be able to benefit from these opportunities. Moreover, they may not be able to ensure their infants are in high quality care as a result of lack of knowledge and information or lack of availability. These considerations need to be taken into account when establishing quality ECE that meets the needs of solo parents who are returning to work or are working flexible hours with low incomes.

17. Poor quality ECE programmes have the potential to cause harm to the infants in their care. When programme staff do not engage effectively with parents, do not provide attachment-based care for infants, and infants are in care for long hours, there can be negative consequences. These may include social-emotional or developmental problems (i.e. communication delays). Cabinet recently agreed to the government ECE work programme which includes improving the quality of ECE to under two year olds. The EAG commends government for committing to this work programme and urges government to monitor and evaluate progress.

Benefits of ECE for low income families

18. High quality ECE can help families and whānau living in disadvantaged circumstances cope with the stresses and challenges of daily life to help ameliorate the effects of poverty and risk for children (Barnett, 1995; Smith et al 2000). The research on <u>family</u>

<u>participation</u> in early childhood programmes demonstrates a positive impact on family members as well as enrolled children.

19. In a review of ECE policy and programmes, Wylie (1994) found that parents involved in ECE services experienced enhanced relationships with their children, alleviation of maternal stress, upgrading of education or training credentials, and improved employment status. These findings indicate that ECE centres serving families living in poverty and disadvantage could consider providing on-site opportunities for parental career exploration and employment preparation along with social networking opportunities.

20. Parents in the *Competent Children at 5* study (Wylie et al, 1996) reported benefiting from their children's ECE participation by feeling supported, establishing friendships, and having social opportunities. Parents reported gaining a better understanding of their children, the value of the early childhood programme, and having raised their awareness of their own parenting and how to enhance their parenting skills. These findings suggest that parents from low income and disadvantaged backgrounds can gain knowledge and experience that will transfer to the primary school setting to further benefit their children.

21. A study of three ECE centres in low-income communities in New Zealand found that the centres provided supportive and safe environments, respected the parents, and provided information about community resources, social support and encouragement. Factors that contributed to effective support were flexible hours, private space for adults to talk, mixed-age groups of children so that siblings could be together with their parent, and stable staffing. Parents reported that the non-judgemental and supportive interactions by the teachers were the most important contributors to their positive experiences. However, staff reported that their ability to provide this support was challenging due to their teaching responsibilities and staff to child ratios (Duncan, et al, 2005).

Specific strategies to support parents

22. Early childhood programmes that integrate parent support as core components of their services are based on ecological systems theory (Bronfenbrenner, 1979). Ecological theory considers the individual, organization, community, and culture to be nested factors, with the individual at the centre of the concentric circles. Each circle operates fully within the adjacent spheres, resulting in constant interactions and influences across the micro, meso and macro levels of society. Family support and quality ECE services are based on this theory and use similar strategies to support children and their parents. Examples of these strategies are:

   - parent education and support groups
   - parent–child joint activities that focus on child development and promote healthy family relationships

- a drop-in centre, which offers unstructured time for families to meet with other families and staff on an informal basis
- child care or supervision while parents/caregivers are engaged in other activities offered by the service (e.g. parent education courses)
- information and referral to other services in the community, including other forms of childcare, health care, counselling and so forth
- home visits, generally designed to introduce hard-to-reach families to family support services
- health and nutrition education for parents and developmental checks or health screening for infants and children (Weissbourd and Kagan, 1989:21; in Duncan, et. al.).

Multi-agency service strategies

23. When viewing children living in poverty and their families as part of a social system, there is logic in providing early childhood services as part of a broader array of community programmes and services. Multi-agency initiatives that incorporate early childhood provisions more adequately meet the needs of parents and, when located in areas of high need, promote equal educational opportunities without stigmatising individual children (OECD 2001:84). Neighbourhood programmes that provide multiple resources along with ECE within one location are sometimes referred to as 'community hubs'.

24. England's Early Excellence Centres provide seamless care and education for children from a few months old to five years. There are some 107 centres, providing all-day and all-year care and education for children, support for parents and often access to adult education as well. Few of these were new centres. Most were established within existing centres or networks of services, with the provision of minimal additional funding to extend the service and encourage the centres to take on training and dissemination roles.

25. The initial evaluation of the Early Excellence Centres indicated substantial benefits for children, families and the wider community. The evaluation found that the centres brought together a range of services that met families' needs without the stigma associated with specialist provision (Bertram et al., 2001).

26. A second initiative to expand early years services in England was the implementation of the Neighbourhood Nurseries Initiative (NNI). The aim of the NNI was to reduce unemployment, thereby reducing child poverty by offering high quality, affordable childcare in the most disadvantaged areas of the country. The national evaluation of the NNI included numerous strands. The Impact Study (La Valle, et. al., 2007) found that NNI had a positive impact on employment with between 10 percent and 20 percent of users being in work that otherwise they would not have been. The Neighbourhood Tracking Study found a positive relationship between living in a NNI rich area (more NNI resources

available) and leaving benefits, albeit the difference between groups was small (Smith & Sigala, 2007).

27. In recent years, the New Zealand government has focused significant resources on determining the most effective ways to improve the developmental and social outcomes of those children most at risk of poor educational and life-long outcomes, including children from low income and disadvantaged circumstances. Although most children participate in ECE prior to school entry, rates from European children are 94.5 percent while those of Māori (89.4 percent), Pasifika (85.3 percent) and children entering decile 1-4 schools (more likely to be from low socio-economic groups) (89.1 percent) remain lower. In order to increase access to ECE services in communities with low participation rates, especially Māori, Pasifika and children from low socioeconomic backgrounds, the government is supporting a multifaceted participation programme.

Intensive Community Participation Programme (ICPP)

28. The Intensive Community Participation Programme (ICPP) is in its early stages of implementation and appears promising in reaching those families whose children will benefit most from quality ECE. The initiative targets geographic areas with the largest number of children who are not participating in ECE. The goal is to increase enrolment of children from low income, Māori and Pasifika families. The Ministry projects that an additional 9,310 children over four years of age will participate in quality ECE through the following initiatives.

Phase one

29. The first phase of this work was to understand the barriers to ECE participation and the needs of those communities with very low participation. A survey was conducted of parents who were not engaged with ECE to identify barriers to participation. The purpose of phase two was to fund organisations to implement engagement strategies in low participation, low socioeconomic communities across New Zealand, based on the findings from the survey of parents.

30. Among the 86 parents surveyed in phase one, cost was the primary barrier to participating in any form of early childhood service. Lack of transportation was rated as the second greatest barrier. Family poverty, family transience, and lack of knowledge of ECE services available were the next most often stated barriers.

31. Ten of the twelve Pasifika parents interviewed were aware of ECE in their community. Some had looked at options but found the cost was too high and there were waiting lists. The Pasifika parents were also somewhat hesitant, feeling that their children should be at home with them while they were young. They also felt that their 3 and 4 year olds would struggle because of language and cultural barriers.

Phase two

32. During phase two, the following initiatives and targeted programmes have been implemented to address the barriers identified in phase one:

   - Supported playgroups. An additional 29 supported playgroups have been implemented in target communities in South Auckland, Tamaki, Kawerau, Huntly, and Whangarei.

   - Engaging Priority Families. This initiative provides intensive early learning support to families and whānau of 3 and 4 year olds in target communities. Providers work with families and whānau to support regular attendance in ECE, strengthen parent involvement in their child's learning, and support their child's transition to school.

   - Identity, Language, Culture, and Community Engagement Initiative. This initiative works with clusters of ECE providers to increase their responsiveness to the people in the community to better engage those with different cultural identities and needs

   - Flexible and Responsive Home-Based Initiative. This initiative provides support to home-based ECE to raise quality and ensure they are culturally responsive and have flexible hours. Another goal of this initiative is to transition informal care to licensed ECE settings.

33. The evaluation of phase two is underway. This initiative aligns with the recommendations of the ECE Taskforce (ECE Taskforce Final Report, 2011). The programme targets high deprivation areas with the largest number of children who are not participating in ECE. As the Taskforce states, children living in poverty and disadvantage are those who can benefit most from quality ECE.

Transition from ECE to primary school

34. The EAG emphasises the need for ECE to support families living in poverty and disadvantage to effectively transition their children to primary school. The transition to school is a significant event for children and their parents. Most parents have the confidence and skills to investigate and select the primary school that is the best fit for their child and their family. The parents of children living in poverty and disadvantage sometimes lack the knowledge of what to look for in a primary school, have language or literacy barriers, or have a myriad of other stressors in their daily lives. These families may need assistance to select a school, engage with the school staff, and communicate their child's information to school personnel.

35. The EAG suggests that ECE centres and the health sector work together to develop an effective transition approach that supports a positive start to primary school for children living in poverty and disadvantage. Many ECEs currently participate in the Before School

Check (B4SC) comprehensive assessment of all four year old children. This check replaces the new entrant health assessment previously provided during a child's first year of primary school and could be a starting point for a partnership approach between ECE and health.

36. The B4SC assessment is facilitated by a registered nurse in a variety of ECE settings and in the homes for children not involved in ECE. Parents and ECE teachers are part of the assessment process. The assessment includes:

   - child health questionnaire
   - behavioural/developmental screening – Strengths and Difficulties Questionnaire (SDQ) and Parental Evaluation
   - Parents Evaluation of Developmental Status (PEDS) tools
   - hearing and vision screening
   - measurement of height and weight recording
   - oral health assessment – Lift the Lip
   - health promotion and education
   - referrals to appropriate health, education or social services and follow up
   - immunisation (if overdue) where possible.

37. The B4SC information and early childhood education child development information could be combined as part of the child portfolio that the parent(s), and an advocate when appropriate, deliver to the school when they visit the school to enrol their child. This tangible resource can assist parents in discussing their child's strengths and needs with the school principal or the child's teacher.

EAG endorses ECE work programme

38. The Ministry of Education's ECE work programme incorporates the primary recommendations of the ECE Taskforce Final Report (2011) and those that the EAG considers critical to mitigate the effects of child poverty within the context of early childhood education. As such, the EAG endorses this work.

Recommendation 1:
The EAG endorses the following Ministry of Education work programme objectives:

   (1)   To maximise the value of the Government's current investment and raise the quality of existing services and;

   (2)   To target more to the children who have most to gain from participation in quality ECE. These priority groups are Māori, Pasifika, and children from low socioeconomic backgrounds.

The policy development work programme is aligned with the recommendations of the EAG. Therefore, the EAG endorses the following policy directions and urges the Government to systematically monitor and evaluate progress. The policy actions are to:

(1)   Improve system quality and performance by:

- *Conducting a national evaluation of the ECE curriculum (Te Whāriki)*
- *Developing interactive web tools to help parents choose the right ECE services*
- *Implementing policy to improve the quality of ECE care received by children under two years old*
- *Implementing policy to improve transitions to school.*

(2)   Design funding policy to support targeting those groups with the most to gain by participating in ECE (Māori, Pasifika, children from low socioeconomic backgrounds).

The role of schools in mitigating the effects of child poverty

39.   Children who are poor and disadvantaged face challenges that place them at risk of poor school outcomes, and consequently poor adult outcomes. Schools can have a powerful impact on the lives of children living in poverty and disadvantage by providing a positive school climate and teacher-student interactions that foster resiliency.

40.   Flessa (2007) reviewed the literature on poverty and education and concluded that policies to address child poverty must incorporate macro (within community) and micro (within schools) level strategies. The importance of school initiatives should be considered within the context of *"mutually supportive social policies"* (p 37). The following sections summarise the research and provide examples of within-school, community-focused, after-school and holiday programmes that apply strategies intended to build resilience and mitigate the effects of child poverty and disadvantage.

Feeding children to support their learning

41.   It is essential that all children's basic food needs are met so that children are able to fully participate and benefit from their school experience. Research consistently shows that children who do not have adequate food at home are likely to be more frequently absent or late to school than their peers, have lower academic achievement and poorer performance, especially in numeracy and literacy, and difficulty concentrating (Yates, et. al., 2010).

42.   The term 'food insecurity' is often used in the literature as not having access at all times to enough food for active and healthy living, as a result of running out of food and lacking the means to acquire it in socially acceptable ways. Food insecurity concerns both the quality and quantity of food available (Casey, et al, 2010; Dunifon & Kowaleski-Jones, 2003; Engels & Boys, 2008; Kennett & Smith, 2001; McCurdy, et al, 2010; Parnell, et al, 2003; Rodgers & Milewska, 2007).

43. Public awareness and political attention to poverty and food insecurity increased in the 1990s. However, the general view was that the family, church, and communities were responsible for addressing these problems (Uttley, 1997, in Yates et. al., 2010). In the following decade there was heightened recognition that the problem of food insecurity among children living in poverty and in disadvantaged environments had not been solved.

44. A Ministry of Health survey found that 20.1 percent of households with school-age children experienced food insecurity (2003). This percentage significantly increased for Pasifika and Māori families, large families, and those from the lowest socio-economic groups (Parnell, et al, 2003; in Yates et.al, 2010). Results of a cross-sectional survey of 136 New Zealand families in Dunedin and Wellington found that 47 percent of the low income families reported that their households ran out of food because of lack of money 'often' or 'sometimes'. This group also purchased fewer vegetables per week. The demographic predictors of food insecurity were families on low incomes, government benefits, and single-parent households (Smith, et. al., 2010).

45. In their review of the literature, Quigley, Watts and Ball concluded that *"a significant number of New Zealand children's diets were so poor that their brain functioning was affected"* (2005). The lack of intake of sufficient levels of micronutrients can result in developmental delays. Cognitive, motor skills, language, vision, and hearing have been linked to undernourishment, especially during the antenatal and early developmental period. Iron deficiency anaemia can contribute to behavioural problems in school as well as lack of a child's ability to concentrate and fully participate in academic and physical fitness activities (Reid, 2000). Children in low income households are more likely to have higher cholesterol intake and eat fewer healthy foods than their peers in higher income households.

School food programmes – The Evidence

46. School food programmes are often designed to alleviate the effects of food insecurity. School 'breakfast clubs' are the most common type of food programme in schools. The United States started this programme in the 1960s as one initiative to alleviate poverty. How the programmes are provided and additional supports available vary by school. For example some schools may focus more on child-staff relationships while others may provide support for families as well. Breakfast programmes have been the primary focus of activity since there is compelling evidence that eating breakfast has a positive impact on children's cognitive abilities, especially memory and mathematics. Moreover, not eating breakfast after having not eaten during the night causes metabolic changes that can contribute to obesity and *"cumulative adverse effects on learning"* (Pollit, 1995, p1135; Wyon et al; in Yates et. al., 2010).

47. Another approach to providing food in schools is to provide packaged food displayed on carts in numerous parts of the school for children to pick up as they pass. Levin (2009) calls this the 'grab and go' principle of classroom distribution. In addition, lunches and snacks are at times provided in some schools that have found students did not come to school early enough for breakfast. The third programme relevant to New Zealand is one that provided backpacks of food to targeted children to take home or high energy snacks to eat during the school day. This programme ensures that children have food outside the other food programmes and school hours (Rodgers & Milewska, 2007, in Yates et. al, 2010).

48. The majority of research regarding the value of school food programmes supports the provision of food in schools for children experiencing food insecurity. A small number of studies have found that low income families who are struggling financially may provide less food for their children at home when they know their children will be fed at school (Dunifon & Kowaleski-Jones, 2003; Kristjansson et al, 2007). The EAG contends that these findings should not deter schools from ensuring that children who come to school hungry are provided nutritious food to promote their learning.

49. The nutritional research is quite clear regarding the importance of children maintaining glucose levels and the levels of iron and micronutrients necessary for their concentration and memory abilities. The evidence regarding the relationship between nutrition and behaviour is weaker. Additional benefits of providing food in schools are the social aspects. The breakfast and lunch programmes offer increased social interaction with peers and between teachers and students and, in some programmes, between teachers and parents.

New Zealand school food programmes

50. Food programmes are now provided in a number of ways within New Zealand schools. Some are operated directly by schools and their local communities, while many others are provided by corporate and private sponsors (e.g. Fonterra, Sanitarium) and charitable trusts (e.g. KidsCan). Until 2010, the Ministry of Health funded the Fruit in Schools initiative, part of the Healthy Eating Healthy Action (HEHA) public health programme, in low decile primary schools (Boyd, et al, 2007). The Ministry of Health discontinued funding for this national initiative in 2009 as part of its reprioritisation of funding in response to immediate fiscal constraints.

Food for Kids programme

51. The KidsCan Charitable Trust (www.kidscan.org.nz) provides the Food for Kids programme, in addition to Raincoats for Kids and Shoes for Kids. The programme targets primary and intermediate schools. The goal of the organisation, which was founded in 2005, is to meet the basic physical needs of financially disadvantaged children so they can fully participate in and benefit from education.

52. KidsCan subsequently began securing funding and sponsorship in order to commence implementation of its first two programmes, Raincoats for Kids and Food for Kids, in June and October 2006 respectively. The third programme, Shoes for Kids, was first implemented in May 2007. As of 2011, these tangible initiatives were supporting the education of over 43,000 children in 208 low decile schools across New Zealand. There is a waiting list of another 211 schools that have requested their assistance.

53. The programmes are funded through multiple sources and include funding and material contributions from numerous corporate and private sponsors as well as the Ministry of Social Development. The Ministry of Health contributed funding to the programme in 2009.

54. The food in schools programme costs per child are $1 per day. In 2011, 208 schools received support in 14 Regions throughout New Zealand. It has estimated that one of every eleven New Zealand children needs support, equating to 15,248 children per day, at a total cost of about $3 million per year. This programme highlights the ability to provide food in schools at a relatively low cost by partnering with the private sector.

Evaluation results

55. Massey University conducted an evaluation of the programme for the first two years of operation. Feedback from 2006-2008 was largely consistent and positive about Food for Kids. Schools reported a positive impact on children's concentration, performance, mood and behaviour, and to a lesser extent attendance. Practical aspects of the programme such as ease of distribution and storage were also well-received. Teachers were also pleased to be able to provide food to those who needed it. An interesting observation from some schools was that relationships had improved between children and teachers: children were no longer anxious about asking for food.

56. While there was significant variation in distribution methods between schools, researchers found that the children's 'sense of dignity' was the guiding principle of targeted distribution, and that this was made possible by the nature of the food items (Yates & O'Brien, 2010, p 22). The research also found that ensuring all children had food meant that the classes were more likely to eat together, which was viewed as a positive social interaction. Some schools also reported improvements in behaviour and performance.

Recommendation 2:

The Government should investigate options for the funding, distribution, and cost of food in schools programmes (e.g. public-private partnerships, matched funding, and joint funding from government, charitable trusts and the business community). To initiate this work, the Government should:

> i. *Conduct a stocktake of existing approaches in New Zealand. An efficient approach may be to conduct an online survey of schools.*
>
> ii. *Pilot and evaluate a range of approaches, based on the analysis of the stocktake.*

Based on results of the evaluation, the Government should lead the implementation of a 'food in schools' strategy that incorporates the most cost-effective model(s) to ensure that all children have the nutrition required to be able to participate fully in their education.

Within-school strategies to mitigate the effects of child poverty

57. The 'Effective Schools' literature focuses on within-school remedies to retain student engagement in school and increase student achievement of children and young people from low income and disadvantaged backgrounds. This literature has strongly influenced policy-makers and educational administrators. 'Effective schools' is the philosophy that schools can *"alter the patterns associated with poverty and schooling outcomes…"* (Corbet, Wilson, & Williams, 2002, p 131, in Flessa, 2002). In his classic study on school effectiveness, Ron Edmonds (1986) deduced that for six hours per day students can be part of an organised and positive school environment that is more impactful than any single influence in their lives.

58. Effective school processes for children at risk of poor outcomes are those that are holistic rather than technical and rote. It is the emotional and affective links between schools and students and the development of positive student-teacher relationships that increase student engagement and positive attitude toward school and education (Neufeld, 1990; in Flessa, 2007). Positive Behaviour for Learning is an evidence-based whole-school intervention that supports individuals and builds a culture within the school.

Positive behaviour for learning initiative to mitigate the effects of child poverty

59. The research on effective schools that support the social and academic success of all students clearly identifies the features of effective whole school approaches to build and maintain a positive school culture in which all students, including those from low income and disadvantaged circumstances, feel a part of the school, are motivated to learn, explore their interests, and achieve success. The early evaluation of the Positive Behaviour for Learning (PB4L) initiative that is being implemented in New Zealand appears promising in improving school culture and promoting positive learning environments for all children.

60. This evidence-based intervention is a systems-based behavioural intervention that incorporates contemporary principles of positive behaviour support (PBS). Defined broadly, PBS is "the application of positive behavioural intervention and systems to achieve socially important behaviour change" (Sugai et al., 2000, p. 133). PBS (called Positive Behaviour for Learning in New Zealand and Australia) has been evaluated in

many primary and secondary schools serving high percentages of low-income and socially disadvantaged students and has shown positive results.

61. The Positive Behaviour for Learning-School Wide (PB4L-SW) intervention is a structure which enables the development of a successful school-wide culture by:

- developing positive and respectful relationships through ongoing consultation with, and decision making by, parents, students, community, and all staff
- developing a caring culture where students and staff feel valued and the whole school community feels safe
- the development of consistent expectations across all settings and by all staff
- teaching behaviours instead of 'expecting' that students just know what to do
- enabling students to identify their strengths and strive for their potential
- maximising the time spent on student learning
- working smarter not harder: as relationships and behaviours across the school community improve, so do student engagement and academic achievement
- using data on student learning and behaviour to make informed decisions.

62. PB4L-SW has the potential to mitigate the effects of child poverty by increasing the capacity of schools serving students from poor families and high deprivation neighbourhoods to keep young people motivated to attend and participate in their education. This intervention is not a quick fix. It takes several months to build the foundations through extensive consultation with the whole school community. Long term commitment is necessary to effect a sustainable change in school culture and school achievement.

63. PB4L-SW is tailored by the school community to work within its present structures and needs. Because students are so involved in the process, the buy-in from them is very high. The intervention has been rolled out to just over 11 percent of schools in New Zealand. Deciles 1-4 represent the greatest number of participating schools, representing 77 percent of the total number of schools implementing the intervention.

Recommendation 3:

Based on the early evaluation findings, the Government should continue and expand the Positive Behaviour for Learning-School-wide (PB4L-SW) intervention and evidence-based targeted behavioural support interventions for parents and teachers such as Incredible Years (IY).

Improving outcomes for Pasifika students - academic counselling and target setting

64. The Compass for Pasifika Success is an initiative that aims to mitigate the effects of poverty and disadvantage faced by Pasifika children and young people. The initiative identifies five key areas (levers for change) to improve educational outcomes for Pasifika

students: literacy and numeracy, families and community engagement, governance and leadership, transitions, and effective teaching and learning.

65. Starpath, at the University of Auckland, is a research project which investigates the barriers to educational success for underrepresented groups. It has worked collaboratively with Massey High School in Waitakere City for the last five years, collecting detailed data on student achievement to identify those barriers. The research indicates that NCEA students can make significant gains when detailed data on their academic progress is used to help them meet their highest aspirations.

66. Starpath evaluated the Massey High School Academic Counselling and Target Setting intervention. The intervention used student achievement data to set individual and whole school academic targets. Data from each student's performance in years 9 through 11 were used to set targets for NCEA that would stretch their abilities. Student's regular academic counselling sessions with Deans and parents were involved in the scheme.

67. The intervention boosted final year NCEA completions by an additional 10 percent one year after it was introduced. The biggest gains were made by Māori and Pacific students, with 16 percent more Māori students and 20 percent more Pacific students achieving NCEA in the vital areas of Level 1 Numeracy and Literacy. These outcomes support the effective schools research showing that students from low income and disadvantaged circumstances respond to high expectations when they are provided with the resources that contribute to their success.

Improving outcomes for Māori students - kura kaupapa and wharekura

68. Māori medium schools have been referred to internationally as effective models for strengthening social cohesion and engaging indigenous people in educational opportunities. The UNESCO Report, *Education for All* (2010) stated *"New Zealand's kohanga reo movement has demonstrated what a powerful force indigenous language revitalisation can be, not only for education but also for social cohesion"* (p 206). NCEA results have confirmed the academic success of kura kaupapa graduates (Ministry of Education, 2007, in Rata, 2011).

69. While most schools teach in English, some teach in the Māori language. These kura kaupapa Māori and wharekura's principal language of instruction is Māori and education is based on Māori culture and values. Most kura kaupapa cater for students from Years 1 to 8. A small number of wharekura (secondary schools) serve students up to Year 13. The EAG recommends that Māori students should have the option of choosing Māori medium schools when they so desire. In order for this to be possible, these opportunities would need to be extended to additional communities.

Schools as sites for delivery of non-educational services to mitigate the effects of child poverty

70. Schools have implemented a range of collaborative strategies to transform how schools together with communities can mitigate the effects of child poverty and empower children to be self-confident and successful in their lives. This section provides examples of school and community strategies that are evidence-based or show promise in mitigating the effects of child poverty and disadvantage.

Families and schools together programme: an Evidence-Based School-Family Model

71. As stated previously in this paper, many children living in poverty and their families face multiple challenges. Children respond differently to family stress. Some develop emotional and behavioural problems or are unable to concentrate in school. Families and Schools Together (FAST) is a programme designed to reduce school drop-out rates by intervening early with children at risk and their families. FAST is based in primary schools and is designed to assist families experiencing multiple difficulties, including child behavioural problems. The aim of FAST is to build protective factors on multiple levels around children who are at risk of school failure, as identified by their teachers, to increase their resilience. The intervention has proven effective in the United States and has been adopted at several sites in both Australia and Canada (www.wcer.wisc.edu/fast/).

72. Children aged four to ten are referred by teachers if they display problem behaviours, hyperactivity, poor concentration or low self-esteem. The programme provides eight weekly meetings involving groups of families and focusing on five key activities:

    i. shared family meals
    ii. communication games played at a family table
    iii. couple time
    iv. participation in a self-help parent group
    v. one-to-one quality play.

73. At the end of the eight weeks, families graduate and continue to participate in monthly follow-ups for two years.

74. Results of the evaluation of the Australian FAST programme show positive outcomes. Pre- and post-treatment data were available for 60 families in five programme sites. Parents reported statistically significant declines in child conduct problems, socialised aggression, anxiety/withdrawal, attention problems, psychotic behaviour, motor excesses and total problem behaviours among their children. In addition, parents reported increases in family cohesion and expressiveness and decreases in family conflict, as measured by the Family Environment Scale. There was also an increase in both cohesion and adaptability on the FACES III scale following the intervention. Prior to the intervention, parents had

scored in the normal range on both of these measures. Additionally, parents reported less parental stress and less isolation from social support networks following their participation in the eight-week programme. Teachers reported an increase in telephone communication and personal contact with parents. Teachers also reported decreases in rates of conduct problems, socialised aggression, attention problems, anxiety/withdrawal, motor excess and total problem behaviours among children (Sayger & McDonald, 1999; in Kalil, 2003).

Schools as 'community hubs'

75. For the purposes of this paper, the school as 'community hub' encompasses the 'extended', 'full-service' school, and the 'neighbourhood' school. These names are given to school models that are school-community partnerships. The underlying principle is the recognition that effective schooling can only occur once a child's welfare and health needs are addressed. The community hub builds parent partnerships and often uses the school site for adult education and neighbourhood activities such as cultural events and community meetings.

76. Wilkin, White, and Kinder (2003) published a review of the literature on extended and full-service schools. The most relevant literature regarding these school-community approaches comes from the United States (USA) and the UK. The rationale for developing these schools was the growing recognition that schools cannot solve the myriad of social and health problems experienced by children living in disadvantaged circumstances and, therefore, schools needed to partner with social service and health resources in order to mitigate the effects of poverty and disadvantage.

77. Following recommendations from the White Paper, *Schools: Achieving Success* (DfES, 2001), the UK enacted The Education Act (England and Wales, Statutes, 2002) which gives governing bodies the power to extend the range of services that schools provide, working in partnership with other providers, to become a resource centre for the whole community.

78. Unlike the UK, the development of 'full-service schools' in the USA was very much a grass roots movement. The USA did not take the central government policy approach. Rather, the USA literature emphasises that there is no one model for 'full-service schools' and that the local diversity regarding how these school-community models evolves represents a major strength (Dryfoos, 1994).

79. The common components of both the UK and USA programmes are:

- Having clear aims and purpose
- Strong leadership
- Administrative excellence
- Consistent, long-term funding from multiple sources (public and private)

- Community and parental involvement
- Effective publicity and dissemination
- An appropriate location
- Opportunities for extended curriculum
- Out of hours learning

80. Two examples of schools as hubs are Victory School in Nelson and Kia Aroha College in South Auckland.

Example 1: Victory Village - Victory School and Community Centre

The Victory School is known across New Zealand as a successful community hub. It was developed nearly a decade ago using community development principals. The Victory neighbourhood is a low income community in Nelson. The school was experiencing multiple challenges in terms of attendance, student behavioural problems and low achievement. The initiative connected diverse professionals and organisations by integrating services into the school. The school facilitated new social relationships in the community with an emphasis on social capital and community development. This school-based initiative evolved into Victory Village, which is a full service community centre that provides health, education, social, and community services and activities.

The community development efforts resulted in the convergence of health, education and social services to form Victory Village. Victory Village is a partnership between Victory Primary School and Victory Community Health. This community hub is a multipurpose community, health and recreation centre and school hall located on the school grounds. The centre provides one-to-one health services for residents, as well as a large number of recreational and social programmes and community events. Community centre services are open to all residents – not just parents of children at the school. The school itself has a family-centred philosophy and involves parents in a number of ways, from social and curriculum events to adult education (Stuart, 2010).

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81. The EAG considers the concept of the school as a community hub to be a viable and important option to mitigate the effects of child poverty in high deprivation communities. The Ministry of Education could provide information from international and New Zealand examples and technical assistance to local schools that are working to improve engagement and achievement of students from Māori, Pasifika, and low socioeconomic and disadvantaged circumstances.

Recommendation 4:

The Government should partner with Boards of Trustees and school principals in low-decile schools and appropriate ECE centres to develop community school models using a community development strategy (e.g. 'community hub' and 'school-within-school' models).

Social workers in schools

82. The New Zealand Government has funded Social Workers in Schools (SWiS) for over five years. The programme places a community social worker within the school. The social worker provides prevention and intervention to children and their families when a child is struggling with education, health, or social issues. The process evaluation of SWiS found that the social worker presence in the school was of value to address child and family issues when they were recognised within the school setting. One of the challenges of the programme is the lack of integration of the social worker role into the culture of the school. That said, school principals appear to value this type of specialist support. The Government has provided additional funding to expand the programme to all decile 1-3 primary schools, with all low decile schools to have social workers by the end of 2012. The EAG endorses this action.

School-based health services

83. The Ministry of Education implemented the Healthy Community Schools (HCS) initiative in 2001 as a pilot programme to address student health and social issues, recognising that these were often barriers to achieving positive educational outcomes. The pilot was known as AIMHI (Achievement in Multi-cultural High Schools). The Ministry of Education initially provided funding to nine decile 1 schools with high numbers of Māori (20 percent) and Pasifika students (72 percent) to assist the schools to better meet the health needs of their students by providing school nurses. The schools augmented this funding with allocations from their operational budgets to employ social workers, and community liaison officers (CLOs).

84. The evaluation tracked the development of the initiative, with the final report documenting the progress of the schools. The evaluation showed that the AIMHI schools made significant gains over a number of areas when compared with other low-decile schools between 2002 and 2004. The AIMHI students expressed greater satisfaction with their school and felt they had greater support for their academic achievement. The AIMHI students also felt that there was support for ethnic diversity within their school, unlike their peers in the comparison schools. In terms of educational outcomes, the AIMHI students significantly increased their educational achievement levels, which were comparable to national results for the respective ethnic groups drawn from all decile schools.

85. In July 2007, the funding of the School-Based Health Services (including school nurses and social workers) was taken over by the Ministry of Health. The funding method changed again in 2008, with the Ministry of Social Development contracting for social work services. The changes in how funding was provided presented employment uncertainty for staff. Moreover, nurses in schools continue to be paid significantly less than those working in the health sector.

86. The EAG *Working Paper no. 17: Health policy and effective service delivery to mitigate the effects of child and youth poverty* presents a summary of the literature on the benefits of health services in schools, especially for young people living in low income and disadvantaged circumstances. In it, the EAG recommends the establishment of sustainable funding for school-based health services.

Alternative education programmes

87. The international literature reports that the public education system has failed to meet the demographic and social changes that have occurred since the 1970s. This literature suggests that many young people living in poverty, disadvantaged neighbourhoods, and isolated poor rural communities have become alienated from mainstream educational

settings and feel a lack of belief in themselves and their futures. All too often, these young people leave school unprepared for the workforce. Alternative education options provide opportunities for students to receive educational, social skills, health, and social supports that are tailored to their needs.

Alternative group education

88. There are a number of students in New Zealand who have been unsuccessful in mainstream schools and can benefit from alternative educational approaches. Many of these students come from low income and disadvantaged backgrounds and frequently require intensive intervention and support to be able to remain in school and successfully complete their education.

89. Alternative education school settings have a low student – teacher ratio and teachers receive specialised training to effectively work with the students. In addition to academics, social skills as well as vocational skills are often part of the curriculum. Coping strategies, stress reduction and relaxation techniques, as well as the importance of physical exercise, and proper nutrition are usually incorporated to support student overall wellbeing (Quinn, et.al, 1999, in O'Brien, et al, 2001).

90. Under New Zealand's alternative education policy, the Ministry of Education provides funding for education programmes for young people, aged 13 to 16 years, who have had significant difficulties within the mainstream setting (e.g. multiple exclusions, lack of attendance for significant periods). In addition to the educational curriculum, the government funds school-based health services in all alternative education settings. The EAG acknowledges the need for alternative education settings for some students. However, when students are placed in these schools, it is critical that they receive the level of academic and transition services that set them on a positive pathway to tertiary training and employment.

Teen Parent Units

91. New Zealand has the second-highest rate of teenage childbirth in the OECD. Māori women and those from the highest deprivation areas account for the highest rates of teen pregnancy and parenting. Figure 2 demonstrates the number of women giving birth in 2010 by deprivation quintile, with quintile 1 being the least and quintile five being the most deprived.

Figure 2. Number of women giving birth by age and deprivation quintile in 2010.

Number of women giving birth

Legend:
- Quintile 1
- Quintile 2
- Quintile 3
- Quintile 4
- Quintile 5

Maternal age (years)
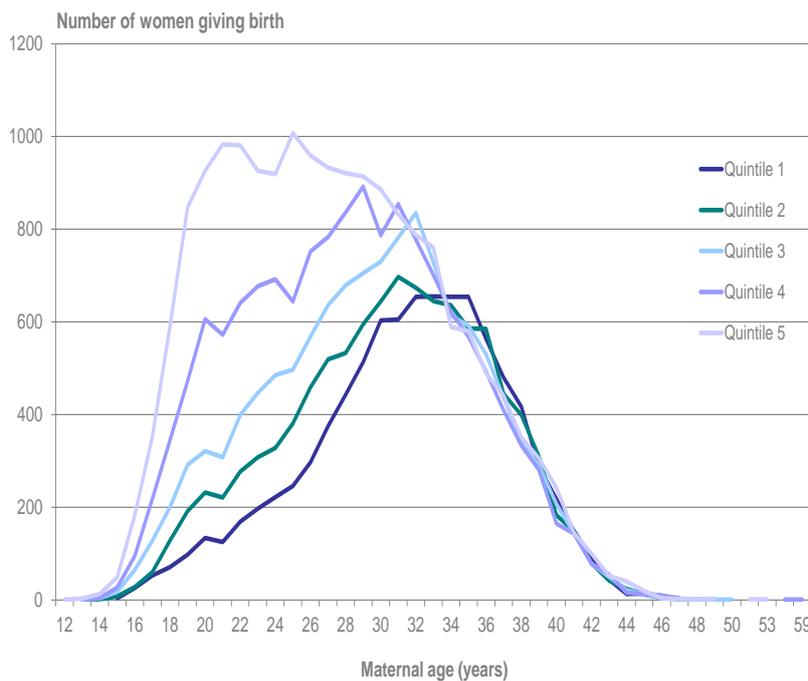
- The greater the deprivation of an area the greater the proportion of younger women giving birth in that area.

- The majority (63.4 percent) of women residing in the most deprived areas (Quintile 5) were under 30 years of age at the time of birth.

- The majority (67.3 percent) of women residing in the least deprived areas (Quintile 1 region) were 30 years or over at the time of giving birth.

Source: Ministry of Health Maternity Facts, 2012.

92.   The education system offers support to teenage parents by funding Teen Parent Units (TPUs). This alternative education setting provides a range of services for teen parents, in addition to the academic curriculum. They can be housed within the school or off site. However, the principal of the host secondary school is responsible for the overall administration of the TPU. The secondary school Board of Trustees is responsible for employment of staff, reporting, and providing resources to the TPUs. Learning programmes are flexible, based on the individual needs of each student, with a teacher and student developing an Individual Education Plan that includes education goals and how each goal will be achieved. The TPUs work with community agencies to address the individual needs of each student. The Ministry of Education specifies that each TPU must be located as close as possible to an Early Childhood Education Centre to facilitate child participation and parent engagement with ECE.

93.   ERO reviewed 18 of the 19 TPUs in 2010. At that time, a total of 550 students were enrolled, with 11 students in the smallest unit and 51 in the largest. The number of students enrolled in each TPU varied throughout the year. Students entered at different stages of their pregnancies and some students dropped out of the programme. Fifty-five percent of students enrolled in TPUs were Māori, 34 percent were European and 12 percent were Pasifika. These percentages reflect the high proportion of teenage Māori and Pasifika parents. However, only 12 percent of all teenage parents participated in TPUs. This small rate of participation suggests that the remaining 88 percent of teen parents were either in mainstream education, correspondence school, or in no formal

educational programme. These findings beg the question to what extent are teen parents who are not participating in TPUs still engaged in education.

94. The review found that, overall, the TPUs were well managed, safe, and supportive. In addition, almost all students were studying towards NCEA credits. Ratings of student achievement indicated that in 15 TPUs all or most achieved NCEA credits and certificates, although in three TPUs only a small proportion of students achieved credits. Most credits were for unit standards and internally assessed achievement standards. The TPUs appear to be effective when students are enrolled and participating through to achievement of educational credits.

95. The Families Commission report, *Teenage Pregnancy and Parenting in New Zealand* (2012), found that many elements of an effective system of support for teenage parents and to prevent repeat teen pregnancies are present in New Zealand. However a number of gaps were identified. The report emphasised the need to provide more effective pathways for teenage parents into education, training, and employment. This finding highlights the fact that the TPUs do not appear to be able to support teenage parents at the point of transition out of the programme. The EAG believes that additional information is needed about the post-TPU experiences of teenage parents, followed by establishment of more coordinated transition to tertiary education, training and employment for young people in the programmes.

Recommendation 5:

The Government should continue to fund existing Teen Parent Units (TPU) and expand the number of these units by encouraging low-decile schools with high teen birth rates to apply for TPU funding. [refer to EAG Working Paper no. 17: Health policy and effective service delivery to mitigate the effects of child and youth poverty for a summary of the literature on health services in schools].

Recommendation 6:

The Government should fund a follow-up study of students who have participated in Teen Parent Units to determine the outcomes of young people who successfully complete their educational programme and those who leave before completing an educational qualification, and analyse existing data to determine outcomes of teen parents and their children.

Schools connecting children and families with technology

96. Access to computers, software, the internet, and technical support have become primary factors that contribute to equal educational opportunity for children and young people living in poverty and disadvantaged circumstances. Schools are ways to connect children and their families with technology.

97. The ICT in Schools Report (2011), survey conducted every one to two years of ICT use in New Zealand schools, reported that student access to the Internet at home differed significantly from estimates of teacher access, with students being much less likely to have access to the Internet at home. This section presents a summary of the literature and examples of programmes most relevant to mitigating the effects of poverty in New Zealand.

Review of the technology initiatives literature

98. The Ministry of Education commissioned a literature review of technology initiatives in compulsory schools in New Zealand and internationally in 2001. Even though the technological advances have been enormous since 2001, the review of the four Digital Opportunity projects that were initiated in New Zealand during that period, provide useful recommendations for supporting students from low-income communities.

99. The review focused on four school-based information and communication technology projects (ICTs). The goal of the projects was to 'lessen the digital divide' for students and sometimes families with low incomes or living in rural areas by increasing access to technology. The review focused on school-based projects in New Zealand, Australia, the USA, the UK and Canada to determine the impact on student learning (Boyd, 2001).

100. The review of the literature on laptop projects found overall increases in student and teacher ICT skills and access to and use of ICT at school and at home. Few studies focused exclusively on low-income students but all reported that laptop students maintained their test scores compared to non-laptop students (Ricci, 1999; Stevenson, 1999; in Boyd 2001), there was a decline in student absenteeism, and increased time-on-task in the classroom (NetSchools Corporation, 2001; in Boyd, 2001). Students and parents reported that students spent more time on homework, less time watching television, and improved performance and attitudes toward school (Ricci, 1999; in Boyd, 2001).

101. The primary benefits for students who used computer technology in Homework or Study Centres in schools were increased access to ICT and development of ICT skills (Penuel et al, 2001; Macias et al, 2000, Latino Issues Forum, 2001; Henriques & Ba, 2000; in Boyd 2001). Students also spent more time on academic activities and received help with homework (Penuel et al, 2001; Raphael & Chaplin, 2000; Henriques & Ba, 2000; in Boyd 2001). These centres are particularly relevant for students whose families do not have the resources to purchase and maintain a computer at home and do not have internet access. Many New Zealand schools provide Study Centres. However, there is little research to determine the impact of these centres on students from low income families.

102. The literature review found that the primary conditions for success of the ICT projects reviewed were strong leadership and vision, backed by continued community support, sustained funding sources, well-trained staff, and capacity to continually provide up-to-date technology.

Results of the survey of student access to ICT in New Zealand

103. New Zealand conducts an ICT Survey of schools every two years to determine ICT usage by staff and students (at school and at home), range of hardware and software, number of students per computer, and age of equipment. The 2020 Communications Trust, established in 1996, is the major facilitator of the survey. The goal of the Trust is to ensure that all children have equitable access to computers and the internet in school and at home.

104. Results of the 2011 survey showed that in New Zealand schools there is now an average of one computer for every three students with network access in most classrooms. Although examining socio-economic differences is not the primary purpose of the survey, the relationship between school decile and the number of students per computer at primary, secondary, and Māori schools is investigated. The latest results show little difference in number of students per computer across deciles. However, many students from low income families do not have access to the internet from their homes (Johnson et al, 2011).

105. Access to technology is one tool that contributes to bridging the gap in educational and life course outcomes between children living in poverty and their more socio-economically advantaged peers. In order to benefit from having access to current ICT (e.g. i-pads, laptops, etc.) schools must first focus on relationships with students and connections with community organisations that bring relevant resources into school settings. Moreover, ICT must be integrated into the curriculum in such a way that it supports and enhances student self-confidence, self-determination, and achievement. For Māori and Pacific low-income and disadvantaged families, school staff must have the capacity to engage effectively to communicate the rationale for the ICT programmes and provide specific suggestions for how the family can benefit from the technology (Boyd, 2001).

106. New Zealand schools serving students in high deprivation areas face challenges when addressing the ICT needs of students in school and at home. The Manaiakalani Wireless Access Project is one approach that is being implemented in the Tamaki area of Auckland to provide a means for students to have technology to support their learning and achievement. This initiative has not been evaluated, however, it appears promising. The EAG suggests that this and other innovative approaches be evaluated to determine how well they are working and whether they show positive impacts on increasing the achievement of students from low income and disadvantaged backgrounds.

> ### *Example 3: Manaiakalani Wireless Access Project*
>
> The Manaiakalani project is a foundation project within the Tāmaki Transformation Programme. The Tamaki area is among the most deprived areas in New Zealand. The vision is that every student from Years 5 to 13 within the Tāmaki catchment area will have a wireless-enabled net device and the ability to access school-based internet services from their home and school. This approach supports families on low incomes to achieve their aspirations for their children by enabling engagement with their children's learning whilst encouraging knowledge and experience-sharing locally, nationally and internationally.
>
> Families with children attending Tāmaki College participate in a lease-to-own programme to purchase netbooks. They make a $40 deposit and pay about $15 monthly, which includes wireless internet access at the school. Parents are also able to pay at the rate that works for them. There are now nine schools participating in the wireless access project, with plans to continue expanding (www.manaiakalani.org/project-management).

Outside school hour programmes to mitigate the effects of child poverty

107. Good before and after school programmes can mitigate child poverty by:

    - Ensuring that parents can work and know their children are safe and engaged in positive activity
    - Providing options for children to continue their learning and development during holiday periods
    - Engaging children in prosocial activities with their peers that encourage positive social interactions.

108. Programmes that enable parents to work and provide their children with the support they need to mitigate the effects of poverty and other risks include: tutoring, mentorship programmes (e.g. Big Brother Big Sister), before and after-school programmes, and holiday programmes (e.g. Computer Clubhouse and community service volunteer activities).

After-school programmes

109. After-school programmes provide opportunities for engaging youth in activities that contribute to their social and educational development. The UK, Sweden, and Norway have well-funded programmes while the Soviet Union may have had the most extensive programmes, ranging from well-equipped technology for science-orientated activities to cultural sensitivity programmes. These programmes were fully government funded. More recently, as a result of educational reform, programmes in the USA have grown as pressure on low-performing schools has increased (Hollister, 2003).

110. Research and evaluation findings indicate that after-school programmes are associated with increases in academic achievement, increased community capital, and reduction in violence in urban communities (Halpern, 2002). A meta-analysis by Laurer et al (2006) indicated that after-school programmes can *"play a vital role in the lives of urban youth"* (p 540, in Woodland, 2008). Researchers report that it is the flexibility and responsiveness of the programmes that allow staff to focus on each young person's social and academic gaps (Durlak, et. al., 2010).

111. Programmes to support students after school include a range of group and individual models. These programmes can be organised under three categories:

- Extracurricular Activities. These are the most common. These programmes offer children and young people a variety of activities that include sports, arts, academic support, and computer technology, among others.

- Mentoring. The core of this model is the supportive adult-child relationship to encourage positive social and emotional development. Caring and supportive relationships with adults is considered a protective factor for children who are at risk of poor outcomes (Patten & Robertson, 2001). The large scale USA study of 1 to 16 year olds who applied to the Big Brother/Big Sister mentor programme found significant differences between groups after eighteen months of participation. The intervention group showed decreased first-time drug use, reduced school absenteeism, and reduced violent behaviour compared with the wait list comparison group. However, other studies found less dramatic effects and caution that adult mentor factors, such as cultural understanding, consistency, non-judgement, and emotional supportiveness, must be present for children to fully benefit from the relationship (Spencer, 2007; in Woodland, 2008).

- Rights of Passage Model (ROP). This model was developed in the USA by African American academics and activists. The model is based on an ancient Egyptian-Kemetic tradition of a youth's transition into the elders' circle of wisdom (Warfield-Coppock, 1992; in Woodland, 2008). The programme incorporates discussions and cultural activities regarding history, academics, and personal development. The curriculum often includes parent workshops and field trips.

  The goal is to increase cultural knowledge, self-esteem, and academic achievement and decrease risk behaviours. Activities are usually led by an older Black 'elder'. When a young person has completed the requirements a ceremony is held that signifies his transition from boyhood to manhood. These programmes are now undertaken for females as well. Studies of ROP suggest that they increase cultural pride and self-esteem and reduce risk behaviours for young Black males. Findings from school-sponsored programmes showed increases in positive classroom behaviour and academic performance.

- Waka Huia – Education Programmes. The Waku Huia centre is based in Kawa Kawa. The education programmes apply to all ages. However, the range of options, including those tailored to individual interests, provides opportunities for young people to participate in art and culture learning opportunities. (www.newzealandMaori art.co.nz/education-programme).

112. The core elements of effective after-school programmes are:

- Quality staff training and education. Programmes with limited budgets may have more difficulty hiring and retaining quality staff due to lower salaries and less funding for training.

- Safety. Programmes must provide safe environments. When located in high risk neighbourhoods, safe transportation home needs to be assured.

- Family Involvement. As with regular school programmes, programmes that involve parents and other adults from the neighbourhood in meaningful ways are most effective in building community capital. Moreover, parents who have positive relationships with staff and understand the programme's goals are more likely to reinforce the goals of the programme by encouraging their children to attend school and focus on positive academic and social activities.

- An enriching after school curriculum. A programme's curriculum should be personally, socially, and academically challenging for the participating young people. This requires planning and engaging young people in the process.

- Evaluation. Rigorous evaluation of the curriculum and effectiveness of the programme will assist in holding administrators and staff accountable and inform policy makers and funding agencies about which components or approaches are most effective in producing desired results (Fashola, 2002; in Woodland, 2008).

- Cultural Responsiveness. This core element is highlighted in the USA literature regarding African American young people and may be especially important for programmes that support Māori, Pacifika, and other ethnic and cultural groups living in low-income communities. After school programmes that are effective create a safe space for young people to develop their self-awareness and confidence in their interpersonal and academic abilities.

The Computer Clubhouse in New Zealand is part of an international network that provides a creative and safe community-based learning environment where young people aged 10 to 18 work with adult mentors to explore their own ideas, develop skills and build confidence through the use of technology. Intel is the primary sponsor, with a number of New Zealand-based and international companies contributing to the 'clubhouses' internationally. There are currently five Computer Clubhouses in New Zealand.

The Clubhouse operates as a drop-in centre and is usually located near schools. Since 2004, SRI International, based in the United States, has been conducting a longitudinal study of student outcomes. Key outcomes of interest are participant socio-emotional attitudes, academic attitudes, and use of technology. Results to date show positive changes in participants:

- use of 21st century skills, including technological fluency
- capacity to follow pathways to success
- commitment to community and service.

Each Computer Clubhouse carries out six monthly assessment evaluations. These data are sent back to headquarters in Boston and aggregated into downloadable reports. The assessments are formative evaluations and are intended to assist each Clubhouse in their planning quality improvement (http://www.computerclubhouse.org.nz).

Student participants have opportunities to attend the New Zealand Summit and the international Teen Summits in Boston (last year 3 students from each Clubhouse and their Coordinator were fully sponsored; last year 50 youth and their coordinators were fully sponsored to attend the first NZ Teen Summit in Manukau City), Clubhouse to Career, Clubhouse to College Programme (C2C) (career exploration and experiences), C2C scholarships to tertiary education. (In 2009 two NZ members from Clubhouse 274 in Manukau were the first New Zealand recipients of C2C scholarships; Perry Knight Memorial Scholarships to university or tertiary training).

Using National Administrative Guidelines to increase provision of before-school, after-school and holiday programmes

113. The Government currently has the responsibility through the National Administrative Guidelines (NAGs) to foster the achievement of all students. The research shows that children and young people living in poverty face disadvantages that make them susceptible to risks that can reduce their ability to succeed in school. The government should act strategically to mitigate these risks.

114. The EAG recommends that the government direct schools through the NAGs to develop and implement within-school and after-school education experiences (e.g. mentoring and holiday education programmes) to mitigate the effects of poverty and other risks to student achievement.

115. The NAGs for school administration set out principles of conduct or administration for specified personnel or bodies. NAG 1 focuses on Boards of Trustees fostering student achievement. Boards of Trustees are required to *"on the basis of good quality assessment information, identify students and groups of students who are:*

- *who are not achieving;*
- *who are at risk of not achieving;*
- *who have special needs (including gifted and talented students); and*
- *aspects of the curriculum which require particular attention" (NAG 1.c).*

Recommendation 7:

The Government should make an addition to the NAG under section 1 that would read as follows:

"1.g [Each board, through the principal and staff, is required to] develop and implement after-school education experiences (such as mentoring and holiday educational programmes) to address the needs of students and aspects of the curriculum", identified in NAG 1.c above.

With the addition of the amendment to the NAG, the Ministry could show support to the schools by:

- *Conducting an inventory of the range of activities currently underway in New Zealand schools (including partnerships with iwi, community NGOs & the private sector) that includes:*

  - *Name and location of school*
  - *Type of programme*
  - *Summary of programme*
  - *Contact person for additional information.*

- *Disseminating results to schools and communities on the Ministry of Education website and through regional offices.*

Out of School Care and Recreation (OSCAR)

116. The OSCAR programme's role is to provide quality care for children aged 5 to 13. The programme is a government-led effort to ensure working parents have safe and reliable care for their school age children while they are working.

117. The OSCAR Foundation was established in 1995 to ensure all New Zealand children have access to affordable and good quality before-school, after-school and holiday programmes. This national body provides coordinated advice and support to the OSCAR sector.

118. The Government currently contributes about $12 million per annum to OSCAR. Work and Income and Inland Revenue provide subsidies towards the costs of before and after school care of up to 20 hours a week and school holiday programmes of up to 50 hours per week. The amount families are entitled to is means tested. This service is an important component of the menu of supports to address the care needs of low income families and, when the service is of high quality, can be an important social and learning opportunity for children living in poverty and disadvantaged circumstances.

119. Out of school care must complement family employment circumstances. There remain gaps in care, especially for solo parents whose hours are variable and those who work in the evenings, or on the weekends. The solutions lie in providing more flexible, high quality options.

Recommendation 8:

The Government should continue to fund the OSCAR programme for children aged five to thirteen and those with disabilities and encourage more schools and community organisations in low socio-economic communities to apply for programme start-up grants. The EAG also recommends that the government provide incentives for programmes to provide flexible hours of care to accommodate the needs of parents who work evenings and weekends.

Support for the transition to tertiary education, training and employment to mitigate the effects of child poverty

120. The transition from compulsory education to tertiary education, training, or employment presents significant challenges to many young people, especially those from low income and disadvantaged circumstances. This section summarises the existing formal pathways and government initiatives that offer options for these young people.

Not in employment, education or training (NEET)

121. The Ministry of Education's *Statement of Intent 2010-2015* earmarks a reduction in the percentage of 15 to 19 year olds not in education or work as a priority outcome. As of March 2012, 13.6 per cent of all New Zealand youth aged 15 to 24 were not in education, employment or training. The rate for Māori learners was 24.8 per cent and for Pasifika learners 19.5 per cent. The government's immediate target is to bring the rate for Māori and Pasifika down towards the current average for all youth by 2012/13 (around six percent).

122. Although achieving this target within the constraints of the current economy will be challenging, the Youth Service programme, which was implemented in August 2012, is expected to progress this target. Youth Service is a new approach to working with young people to help them achieve their educational and employment goals. Youth Service providers work actively and intensively with young people by providing ongoing support and mentoring to improve their educational and employment outcomes. A number of options to actively support young people are presented on a new government website (www.youthservice.govt.nz).

Trade academies

123. Trade academies are partnerships between schools, tertiary providers and industry training organisations (ITOs). They provide 16 and 17 year olds the opportunity to combine a secondary school programme with learning in tertiary education and/or industry settings. Students can begin working on their trade careers and earn credits towards their NCEA simultaneously. Eight Trade Academies were opened in January 2011, with another 13 to be opened by the end of 2012. These trade academies can benefit students from low income families by providing the guidance and any other educational or financial support required to link these students with tertiary education and/or the trade business opportunities.

Service academies

124. The New Zealand Defence Force runs these programmes within low decile secondary schools for year 12 and 13 students. The Academies provide outdoor education, physical fitness, goal setting, leadership, and life skills to young people while they work toward their NCEA. The results of an Educational Review Office (ERO) report in 2011 found improvements in student motivation, academic achievement, behaviour and physical fitness.

Youth guarantee and youth training

125. Youth Guarantee and Youth Training programmes offer student placements at polytechnics and private training organisations. Young people under age 18 who have left school can enrol in vocational courses without having to pay student fees. These programmes provide tertiary education opportunities for about 7,500 young people. For students who have been disengaged with education, additional outreach and possibly mentorship will be required to support their enrolment and success in this training programme.

Conclusion

126. This paper verifies the important role that early childhood and compulsory education play to mitigate the effects of child poverty and reduce poverty in the longer term. The paper

provides examples of effective and promising initiatives and interventions, especially in New Zealand, that the EAG recommends be continued and/or expanded. In addition, the EAG recommends that promising initiatives (e.g. food-in-schools, school-community partnerships) currently underway be extended. In order for the potential of these initiatives to be realised, the EAG suggests that the Government's investment be guided by the following principles:

a. Leadership and commitment at the national and community levels is required to do whatever it takes to support the motivation and achievement of children and young people living in poverty and disadvantage.

b. Early childhood education (ECE) and schools have an important role to play in mitigating the effects of poverty on children and young people across the life course.

c. Quality ECE and schools must build strong partnerships with the families of children living in low income and disadvantaged circumstances.

d. ECE and schools must know their communities and work in partnership with community organisations and the private sector in order to establish a school-community culture that provides the range of supports that meet the needs of children and their families (i.e. build social capital).

e. Government is responsible for ensuring ECE and schools follow evidence-based and promising practices to support the social and academic development of all children and young people.

127. This paper emphasises that children and young people are able to attain educational goals and pursue their career goals when their basic needs are met and when they have the resources and support they require to engage in academic and prosocial activities. During early childhood, parent engagement with ECE and positive initiation to primary school are essential factors to the success of children living in poverty and disadvantage. Moreover, parents are able to pursue tertiary education and employment when their children are enrolled in high quality ECE, and before and after-school, and holiday programmes are easy to access. Finally, this paper urges the strengthening of partnerships between education, the social and health sectors, and the business community to provide the range of services and resources that allow children and young people living in poverty to believe in their abilities and achieve their goals.

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Appendix 1: New Zealand Educational Context

Structure of the Educational System

New Zealand's education system has three levels – early childhood education, schooling and tertiary education. Education is compulsory for all students aged between 6 and 16 years, though the vast majority of students begin school at age five.

The Ministry of Education states that early childhood education (ECE) is for children under five and *"…is characterised by strong quality assurance and a world-leading national curriculum [Te Whariki]."* While there is a high degree of participation in ECE, children who are poor, especially Māori and Pasifika, participate less than children from European heritage.

Compulsory schooling, is free in the state system. New Zealand has nearly 2,600 schools, most of which are publicly owned and funded by the government. They follow a national curriculum but are self-managing and governed by locally elected boards of trustees.

Primary education in the early years provides a strong foundation in literacy and numeracy and an introduction to a broad and balanced curriculum. The secondary years (ages 13 to 17) offer subject-based learning, supported by career counselling. The primary purpose of secondary education has been to prepare students for tertiary level training and university entrance.

Most schools teach in English, but some teach in the Māori language. Kura kaupapa Māori and wharekura are schools in which the principal language of instruction is Māori and education is based on Māori culture and values. Most kura kaupapa cater for students from Years 1 to 8. A small number of wharekura (secondary schools) serve students up to Year 13.

Māori medium schools have been referred to internationally as effective models for strengthening social cohesion and engaging indigenous people in educational opportunities. The UNESCO Report, *Education for All* (2010) stated 'New Zealand's *kohanga reo* movement has demonstrated what a powerful force indigenous language revitalisation can be, not only for education but also for social cohesion" (p. 206). NCEA results have confirmed the academic success of kura kaupapa graduates (Ministry of Education, 2007, in Rata, 2011).

Tertiary education in New Zealand is delivered by a variety of providers. Universities, Institutes of Technology and Polytechnics (ITPs), Private Training Establishments (PTEs) and Industry Training Organisations (ITOs). These organisations deliver a range of educational options, often in flexible ways, to meet the needs of adult learners.

Administration and Funding

Administrative authority for most education services is devolved from central government to the educational institutions which are governed (in the public sector) by individual Boards or Councils, members of which are elected or appointed. Schools and tertiary institutions work within the framework of guidelines, requirements and funding arrangements set by central

government and administered through its agencies. Although there is diversity in the forms of institutions through which education is provided, national government policies and quality assurance mechanisms are employed to support continuity and consistency across the system.

The Ministry of Education allocates a proportion of the Vote Education government funds to schools based on specific funding formulas. Each school is classified based on the economic status of residents within each school's designated enrolment area. A school's decile rating reflects the average family or whānau backgrounds of students enrolled. There are ten deciles and around 10 percent of schools are in each decile. Decile one schools have the highest proportion of students from low socio-economic backgrounds whereas decile ten schools have the highest proportion of students from high socio-economic backgrounds. The lower a school's decile rating, the more funding the school receives. The increased funding given to lower decile schools is intended to provide additional resources to support students' learning needs. The decile rating does not measure the standard of education delivered by a school. In addition, because the decile rating is based on the average, each school includes students from low, middle, and upper income households. Therefore, children from low socioeconomic backgrounds can be attending school in any of the deciles.

Even though compulsory schooling in New Zealand is considered to be 'free', there are a number of additional financial costs to parents. All schools ask parents to provide stationary. In addition, some primary and most secondary schools require students to wear a school uniform. School uniforms vary in cost. An additional expense for parents is paying for their child's outside-the-classroom learning experiences. While parents can make arrangements with the teacher or principal so that their child can participate, in some cases parents are uncomfortable or embarrassed to do so and children may miss out on these learning experiences. There is an additional cost to parents called a 'donation'. The added school donation may be above and beyond what families living on low incomes can reasonably afford. Schools serving predominantly low income families should receive additional assistance either through the government and/or the private sector to support these additional expenses and to cover the costs of student outside-the-classroom learning experiences.