Time to Act

Investing in our children and our future

minderoo FOUNDATION

thrive by five

A Message from Nicola Forrest

CEO, Minderoo Foundation

Australia needs a workforce capable of meeting the challenges of a knowledge and technology-based economy but also citizens able to participate in and benefit from the social well-being of our country.

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In 2010, I was invited to visit the Challis Parenting and Early Learning Centre (CPELC) to observe their integrated early intervention program. The CPELC, located at the Challis Primary School, is in Armadale, considered to be one of the lowest socio-economic suburbs in Perth. I was very impressed by what I saw and Minderoo became an investor in the program.

Since then, the program has produced outstanding outcomes, lifting the children on a developmental measure from below state average to above state average. These results have been documented by the Telethon Kids Institute in a report commissioned by the Minderoo Foundation.

Over the past 10 years, we have supported many early childhood and education related programs in response to disadvantage within our community. This support has enabled some fantastic results to be achieved across Australia and we are honoured to have partnered with many great organisations.

However we have become acutely aware of the need to take a preventative approach if we are to truly lift the outcomes of our most at-risk children. In other words, we must address the cause not the symptoms of disadvantage in our community.

A review into Indigenous training and employment undertaken by Minderoo's Chairman Andrew Forrest at the request of the then Prime Minister the Hon Tony Abbott was released in August 2014. *Creating Parity – the Forrest Review,* highlights the importance of the first three years of a child's life in determining their trajectory and proposes integrated strategies as the most effective approach to address individual and community disadvantage.

Research shows that the biological pathways developed in early childhood influence health, learning, behaviour and well-being throughout a person's life. The research also shows that a national commitment to well-designed and implemented integrated early intervention programs can improve children's development and deliver transformative economic and social benefits.

The smart course for all governments is to ensure that every disadvantaged child has access to such programs. This course is the most cost-effective, efficient and evidence-based strategy to address economic and social disadvantage. Further, such an approach will set our children on a path to personal achievement that will contribute to the productivity and resilience of our nation.

The Minderoo Foundation Board has set early childhood development as one of its priority areas under the banner of Thrive by Five. This document represents our reasoning behind this decision and the actions we have resolved to undertake.

The importance of early childhood investment for the future of our nation demands a partnership and shared commitment between government, the community and philanthropy.

We welcome partnerships and collaborations with the many talented and committed organisations and individuals working in this critically important area.

MINDEROO FOUNDATION

Nicola Forrest

Overview

We know that children develop in the context of families and communities and that early childhood is a time of both great opportunity and significant risk (Shonkoff and Fisher, 2013). It is during the first three years of life that 90% of brain growth occurs. This highly sensitive period is thus critical to every individual realising their future potential. If early adversity is not mitigated, vulnerability can impact on lifelong learning, behaviour and health (Center on the Developing Child at Harvard University, 2016).

The Australian Early Development Census (AEDC) has shown that in Australia, one in every five children is considered developmentally vulnerable; children whose poor health, social competence and language skills mean they are less likely to commence formal education 'school ready' (AEDC, 2015). Latest data has also shown that children living in the most socio-economically disadvantaged areas of Australia are three times more likely to be developmentally vulnerable than those from the least disadvantaged areas. This variation reinforces the need to consider targeted policies in priority communities, within a universal platform (Brinkman, Gialmas, Rahman, 2012).

Decades of research demonstrate that early childhood outcomes are likely to be reflected in school age achievements, through to adulthood (see for example Nores and Barnett, 2010). In the Australian context, research has demonstrated that a child's skills, development and attributes at school entry or age five will predict later literacy and numeracy skills, at ages eight, nine and ten. (Brinkman, Gregory, Harris, et al, 2013). It is therefore critical that the first few years of a child's life are prioritised as a platform for lifelong success.

In addition to the social benefit likely to result from strong early childhood outcomes, Nobel Laureate Professor James Heckman has confirmed that economic benefits will also flow to those who prioritise their children. Heckman's modelling predicts a return of 13.7% per annum and a benefit/cost ratio of 7.3% for every $1 spent on effective early childhood programs (Garcia, Heckman, Leaf, Prados, 2016).

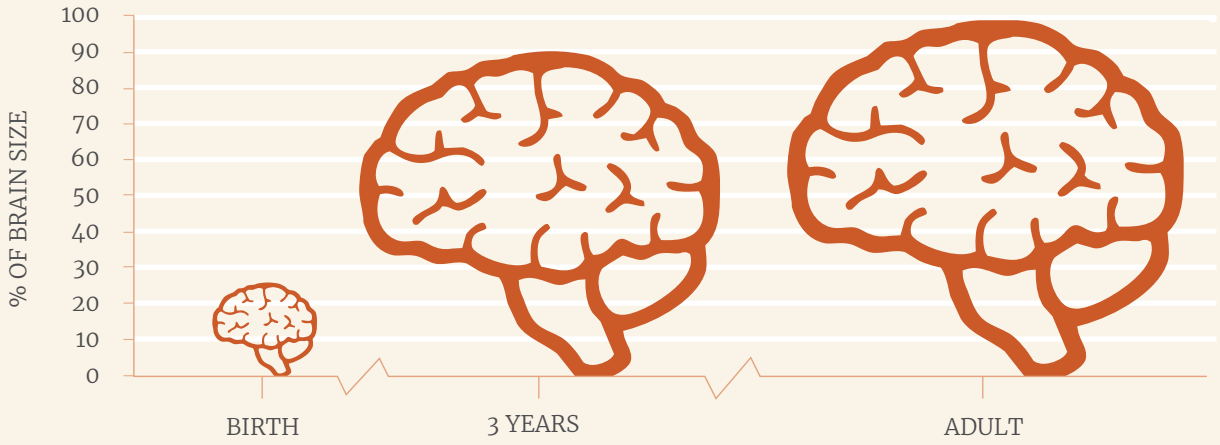
This return on investment is realised through reduced crime, raised earnings, higher education levels and better health outcomes.

In the Australian setting, modelling completed by PricewaterhouseCoopers has also shown significant cumulative contributions to Gross Domestic Product (GDP) through more effective expenditure in the early years (PricewaterhouseCoopers, 2014).

Despite it being globally accepted that nations who invest in the human capital of the next generation are likely to have stronger economies and societies, Australia's policy response to disadvantage has been largely remedial (Clark and Jackiewicz, 2014). Budget commitments and policy objectives are focused on intensive pre-employment training, school attendance measures, increased incarceration capacity and adult literacy programs. Such responses are necessary; however, early intervention is a more cost efficient and effective way to deal with disadvantage.

While it is every parent's responsibility to provide early childhood nurturing and care, some may lack the education, income and social skills to provide this without support. As a nation, we have a social responsibility to help vulnerable children and their families gain access to the resources they need for effective early childhood development. The returns to the nation will be significant in terms of future savings to the social services, education, health and juvenile justice budgets.

Increases in brain size with age



Minderoo believes the time to act is now.
It is time to invest in solutions for future generations while we continue to address today's problems.

Australia Snapshot

On three basic dimensions of human development and standards of living, Australia is ranked second out of 187 countries and territories by the United Nations (United Nations Development Programme, 2015).

As a nation that enjoys an enviable 'lucky country' reputation and a relatively strong and stable economic, political and social context, Australia's child development and educational outcomes have failed to reflect our national prosperity.

- 22% or over 66,000 children in Australia are developmentally vulnerable at age five (AEDC, 2015).
- There has been no reduction between 2012 and 2015 in the overall proportion of vulnerable children (AEDC, 2015).
- 42.1% of Indigenous children are developmentally vulnerable on one or more domains (AEDC, 2015).
- Australia's performance in the Programme for International Student Assessment (PISA) has fallen across all domains of literacy every year, since 2009 (PISA, 2015).
- Australia's proportion of high performing students has consistently decreased since 2006 (PISA, 2015).
- Australia's proportion of low achieving students has consistently increased since 2006 (PISA, 2015).
- Vulnerable students (including Indigenous students, those from low socioeconomic backgrounds and those in regional and remote areas) continue to perform significantly lower than their peers (PISA, 2015).
- In relation to other nations, Australia has fallen from a ranking of second in reading and literacy in 2000 to sixteenth in 2015 (PISA, 2015).

If Australia wants to compete in the global market, reduce welfare costs and improve the health and well-being of the nation, then focus must be on prevention not remediation. Minderoo believes that as a nation, Australia must take a long term and evidence-based approach to early childhood development to give every child the foundation to reach their full potential.

Develop

Nurture early development of cognitive and social skills in children from birth to age five.

+

Sustain

Sustain early development with effective education through to adulthood.

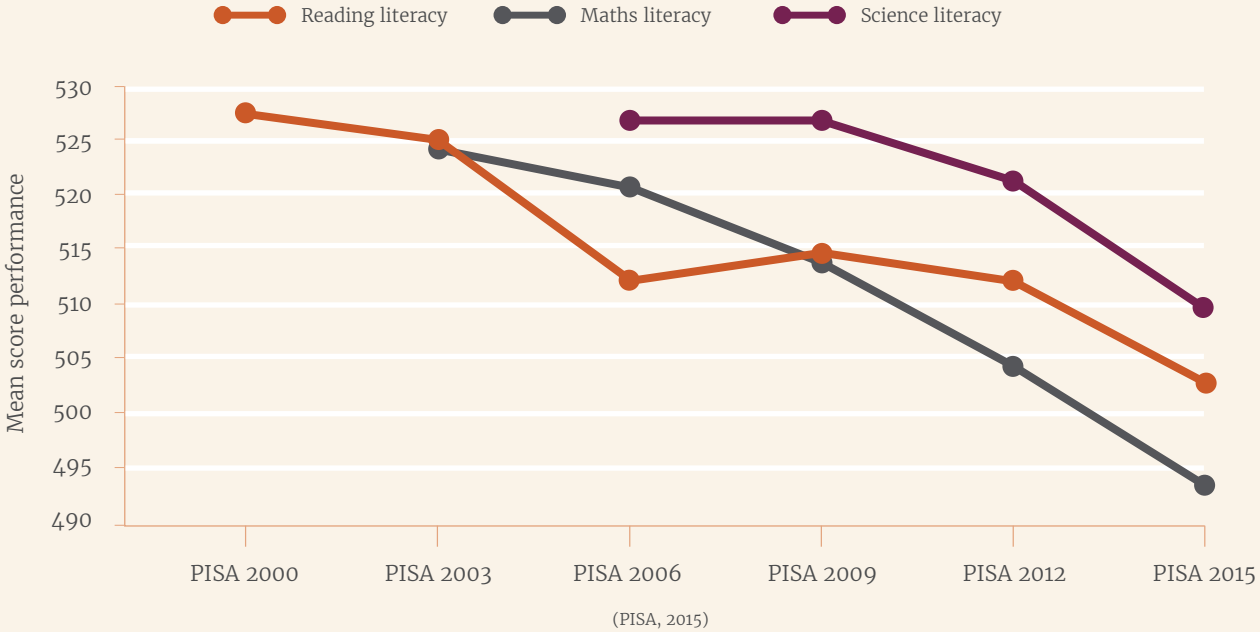
=

Gain

Gain a more capable, productive and valuable workforce that pays dividends for generations to come.

www.heckmanequation.org

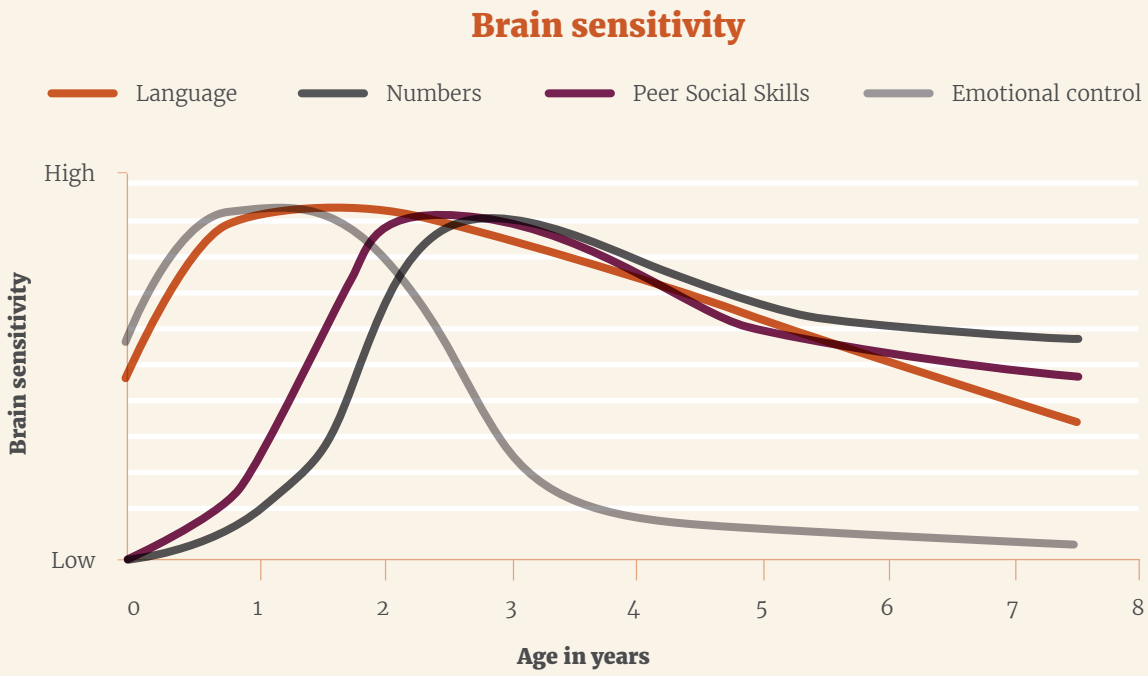
Trends in Australia's Programme for International Student Assessment Results 2000 - 2015



(PISA, 2015)

The case for early investment

By the age of three years, a child's brain has reached 90% of its adult size and research indicates that the brain sensitivity to language, numeracy, social skills and emotional control peaks before the age of four.



(Council for Early Child Development, 2010)

Over the past decade advances in the science of early development have shown that the biological pathways developed in early childhood influence lifetime health, well-being, learning and behaviour. The science also shows that improving children's development before this critical period can have transformative social and economic effects.

Every child needs effective early childhood supports. Early development takes place in the context of families and communities and is shaped by the everyday experiences and environments from birth which establish pathways for lifelong learning, behaviour and health.

Disadvantaged families are the least likely to have the economic and social resources to provide the necessary early development stimulation every child needs to build the foundation necessary for future success. A child who does not receive the required early nurturing, learning experiences and physical health care in the early years is likely to commence formal education without being 'school ready'. For too many of our children this development gap never entirely closes leading to a cycle of disadvantage that prevents full participation in our society.

According to AEDC data, 22% or over 66,000 five years olds in Australia are at risk of such lifelong vulnerability (AEDC, 2015).

Research shows that one of the most effective strategies for economic growth is investing in the developmental growth of at-risk children. This invesment will produce greater returns to individuals, families and the nation in the form of better education, health, economic and social outcomes.

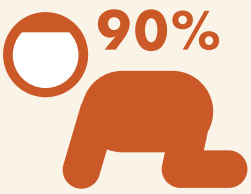
Longitudinal research conducted in the United States, for example, found significantly reduced later juvenile delinquency and crime, where early childhood programs were implemented as early as possible, with consistency for vulnerable families (Hawley, 2000).

Such outcomes are likely to be possible in the Australian context, yet resources continue to be directed to the symptoms rather than preventative strategies.

Well-defined programs which serve the interests of babies, toddlers and young children can provide the stimulating environment that is of critical importance in the early years and which may be missing in the home.

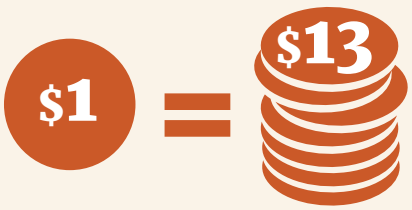
Short-term costs are more than offset by the immediate and long-term benefits through reduction in the need for special education and remediation, better health outcomes, reduced need for social services and welfare, lower juvenile justice costs and increased self-sufficiency and productivity among families.

International cost benefit analysis shows that for every dollar spent on effective early childhood intervention, there is a $13 return to society (Garcia, Heckman, Leaf, Prados, 2016).



Critical age

90% of brain development occurs from 0 to 3 years



Worth the investment

For every $1 spent on early childhood, society sees $13 returned

These rates of return are possible for two reasons:

- Younger people have a longer horizon over which to recoup the fruits of their investments; and
- Skill begets skill. Skill remediation programs for adults with severe educational disadvantages are much less efficient compared to early intervention programs as are training programs for more mature displaced workers.

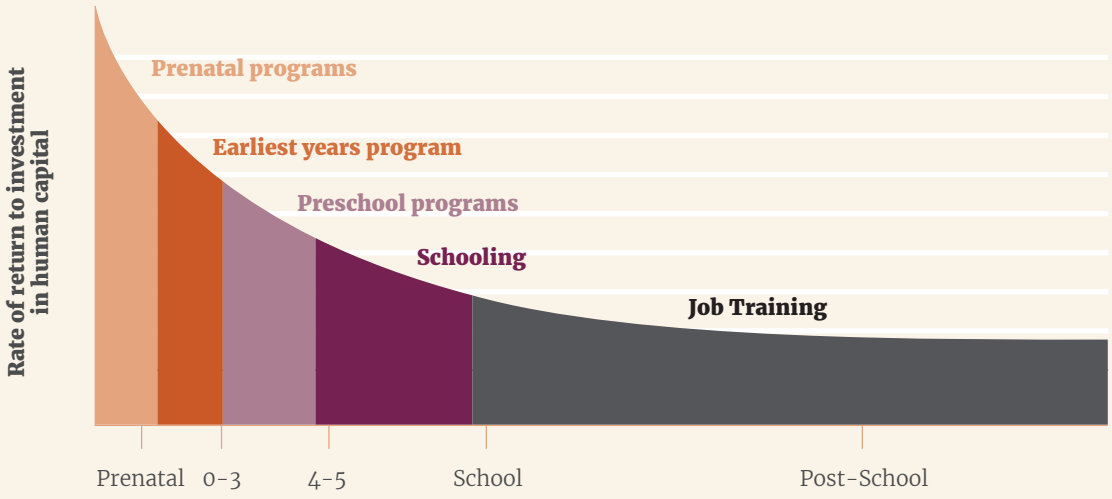
Remedial programs should not be discarded, rather priority should be given to preventative programs, if nations are to reap all benefits of a productive community.

Successful economies and societies of the future will be those with a well-educated and adaptive population capable of creative and innovative thinking. With educational outcomes continuing to fall, it is unlikely that Australia will be able to keep up with its competitors in the global economy.

In the long run, significant improvements in the skill levels of Australian workers are unlikely without substantial improvements in the arrangements that foster early learning. We cannot afford to postpone investing in children until they are adults, nor can we wait until they reach school age - a time when it may be too late to intervene.

Early childhood development is a smart investment

The earlier the investment, the greater the return



(Heckman, 2012)

Early experiences and some of their lifelong consequences

Experiences	**Sustained poverty**	**Abuse & Neglect** (physical, emotional, sexual abuse & neglect)	**Early mental health problems**	**Conduct problems**	**Poor health and nutrition**
Consequences	Unemployment, low income, and low working hours.	Depression, anxiety, drug abuse, suicidal behaviour, STIs, health issues, trust problems, security issues.	Emotional problems, leaving school early, criminal justice system contact, poor physical health.	Anti-social and criminal behaviour.	More health problems, poor academic achievement, not graduating on time.

(Adapted from Moore and McDonald, 2013)

“Thrive by Five represents Minderoo’s efforts to encourage a long term and evidence-based approach to the way Australia prioritises its children”

NICOLA FORREST

Effective early childhood investment

In addition to an increasing focus on the area of early childhood investment and pre-birth engagement, there has been a consistent shift towards the notion of integration between services and disciplines as the most effective way to lift outcomes.

Servicing the needs of a vulnerable child requires a multi-disciplinary approach with holistic case management. However some current governmental policies and structures prevent such an approach. This leads to fragmentation, duplication and an ineffective use of resources, both human and monetary. Co-locating and integrating existing services at one site leads to more effective service delivery and reduces the risk of a child 'slipping through the cracks'.

There is no single blueprint for the ideal set of effective early interventions. Integrated models should be based on the diagnosed needs of a community and be flexible to changing demographics (McCain and Mustard, 2002).

A review of the British Government's Sure Start program found that while early intervention and family support services may differ, successful approaches within the program demonstrated six characteristics:

- Two generations: Parents are involved as well as children;
- Non-stigmatising: There is no labelling 'problem families';
- Multifaceted: Target a number of factors, not just education or health or parenting;
- Persistent: Programs last long enough to make a real difference,at least to age eight;
- Locally driven: Consultation with and involvement of both parents and local communities; and
- Culturally appropriate: Programs are sensitive to the needs of children and parents.

(McCain and Mustard, 2002)

A common framework helps ensure an even level of quality across different forms of provision and for different groups of children, while allowing for adaptation to local needs and circumstances.

At a national level and in response to a growing number of countries making concerted efforts to encourage quality early childhood programs, the Organisation for Economic Co-operation and Development (OECD) has identified five key policy levers to enable effective investment. These include:

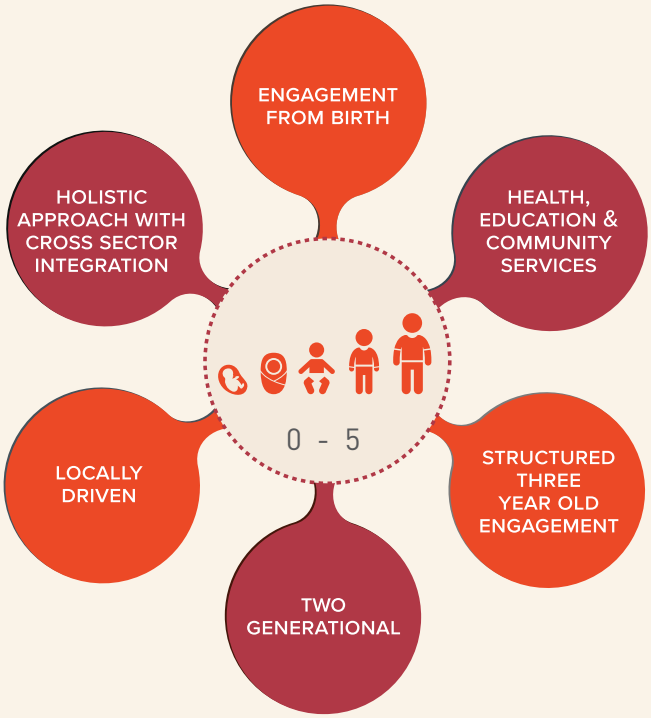
- Setting out quality goals and regulations;
- Designing and implementing curriculum standards;
- Improving qualifications, training and working conditions;
- Engaging families and community; and
- Advancing data collection, research and monitoring.

In addition, policies and programs should be designed to:

- Promote healthy pregnancy, birth and infancy;
- Improve parenting and family supports;
- Strengthen early childhood development and care; and
- Strengthen community supports.

(OECD, 2012)

Importantly, the OECD recognises that such levers and policy outcomes are applicable no matter what stage of reform a nation may be at. In other words, simply expanding access to services or increasing budget expenditure on early childhood is not enough. Good outcomes for children and long term benefits for society are dependent upon strategies that deliver quality, holistic and intensive support, not interventions that 'cherry pick' or target vulnerability in an ad hoc fashion.



Minderoo similarly believes successful approaches, both at a system and service level, must share the following characteristics:

- Engagement from birth with mothers and families;
- Integration between multi-disciplinary providers where a number of factors, not just education, health or parenting are targeted;
- Structured three year old engagement that provides the foundations for literacy and numeracy and supports social and emotional development;
- A locally driven and responsive governance structure that ensures the needs of the community are met; and
- A holistic approach where relevant sectors are planning and working together with strong leadership.

Strategies for success require the integration and localisation of service delivery to allow a holistic approach to the management of disadvantaged children.

This begins with early engagement, preferably before birth with mothers and families. Pregnancy, birth and infancy experiences have a profound effect on the health and well-being of babies and young children and contribute to continuing good health. A child health nurse is essential as part of the integrated team.

Early diagnosis of developmental issues is a critical part of the program and immediate access to specialist and remedial services should be available at the same location.

The early learning programs need to focus on parents and families as well as children. Parents are the primary teachers of their children and have principal responsibility for their care. Strengthening parenting and family supports is an essential element of early development programs.

Quality early child development also focuses on the physical, language and motor skills of the child, providing opportunities for interaction and play, and with a structured approach from age three.

The early childhood focus of primary schools and their community settings make them an ideal location for integrated service delivery. Primary schools are easily accessible, are well resourced with play and learning spaces and build a routine of school as a critical part of a child's development. Other community facilities may provide potential options for integrated service delivery; however there must be connection with the local school to ensure a child is linked into an ongoing pathway of education.

Strong school leadership and instructional capacity with a single point of accountability provide the foundation for the delivery of the co-ordinated, intensive and early efforts to meet specific developmental milestones before a child starts formal schooling.

Integrated service delivery based on such criteria should deliver effective and intensive support to families while building their capacity to lead healthy, productive lives as well as quickly lifting outcomes for children in the critical early development phase of their lives.

Effective approaches at the community or service level must be implemented within a supportive policy framework with agreed long term outcomes. Without leadership from government, effective responses remain confined to the determination of local champions and organisations. Alternatively, promising practices may be resourced through inconsistent funding streams or as a result of short term policy changes, limiting the consistency and potency of interventions. Under the banner of Thrive by Five and led by Nicola Forrest, Minderoo is advocating for a shift to greater investment in early childhood across Australia that enables healthy, happy and thriving children.

"By ensuring every child starts their education with the social, emotional and physical skills to learn, we will build a stronger, connected and more vibrant Australian community"

NICOLA FORREST

Time to Act

To achieve a strong and vibrant Australia, we must start with a long term and nationally coordinated early childhood strategy. Minderoo is working at both the ground and system level in partnership with a variety of stakeholders to contribute to an Australia where every child can reach their full potential. Our efforts include:

ADVOCACY

Providing a voice for the most vulnerable and disadvantaged.

Minderoo recognises its unique ability to provide a voice for those who are most vulnerable. We are advocates for solution-focused change based on evidence, prevention and collaboration. Our guiding early childhood messages include:

- 90% of brain growth occurs by the age of three years. Our education, health and social policy decisions must reflect this;
- Child development is multifaceted and requires an integrated approach encompassing education, child and maternal health and social services;
- We cannot rely solely on the child care system to reach our most vulnerable children and families in the critical early years; and
- Services and policies must engage with parents and caregivers who have the most influence on a child's development.

COMMUNITY PARTNERSHIPS

Investment in partnerships that inform and underpin our advocacy, research and policy engagement.

Since 2012, Minderoo has invested in the Challis Parenting and Early Learning Centre in Armadale, Western Australia. The Challis integrated, place based model of early childhood and family service delivery has seen its children go from a position of disadvantage to exceeding the state average at the start of school, every year since 2012. The model has informed a number of policy initiatives as a demonstration of effective and innovative practice.

POLICY

Demonstrating successful and scalable approaches to complex problems.

Minderoo engages with the government at all levels to share its experiences and perspectives from the community. We partner with the community to prove new ways of working that can be scaled by government. Minderoo's investment in the Challis model has informed the Federal Government's commitment to implement increased integrated service delivery hubs around Australia, as recommended by Chairman Andrew Forrest in *Creating Parity – the Forrest Review* (Forrest, 2014).

RESEARCH TRANSLATION

Enabling the translation of research into effective policy, practice and service delivery.

Hosted by the Telethon Kids Institute and seed funded by the Minderoo Foundation, the Early Childhood Development and Learning Collaboration (CoLab) is led by Professor Donna Cross. CoLab will bring together the community, families, clinicians, educators, government, researchers and other stakeholders to drive greater translation and application of evidence to inform long term system change.

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