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Commissioners Jonathan Coppel and Julie Abramson
National Education Evidence Base
Productivity Commission
Locked Bag 2, Collins St East PO
Melbourne VIC 8003

By email: education.evidence@pc.gov.au

Dear Commissioners,

RE: Submission to the Education Evidence Base Inquiry

Please find enclosed a submission to the Education Evidence Base public inquiry on behalf of the Minderoo Foundation. In preparation of this submission, the Minderoo Foundation reached out to other key stakeholders to ensure their input was provided. Specifically, we have engaged with Early Start (University of Wollongong), Goodstart Early Learning, the Life Course Centre (University of Queensland), Telethon Kids Institute, Mitchell Institute and Murdoch Children's Research Institute in order to test out our proposed submission and provide a united approach on key issues. Alignment on specific responses is referred to throughout this submission. Where not specified, it is the opinion of the Minderoo Foundation only that is expressed.

The Minderoo Foundation was established by Andrew and Nicola Forrest in 2001 and was originally known as the Australian Children's Trust. The Foundation's [work](#) was based on the mandate to give a hand up, not a hand out and that ethos remains today. Since establishment the Foundation has supported over 230 initiatives across Australia and internationally in pursuit of a range of causes including education, ending slavery, research, indigenous disadvantage, disaster response and the arts.

We have a particular [interest](#) in the importance of early childhood development. Children are our most important asset. The greatest return on investment any nation can make is to prioritise its children before the age of five. Further we believe [integrated approaches](#) between governments, service providers and disciplines at a community and policy level are the most effective way to holistically deliver services to those most vulnerable.

Data is a critical component of this equation. We commend the Commission for its efforts to gain a clear grasp of this issue through this Inquiry. In December last year, the Minderoo Foundation and the Telethon Kids Institute launched the Early Childhood Development and Learning [Collaboration](#). It is bringing together leading educators, clinicians, community and researchers to improve service delivery to meet the needs of vulnerable children, families



and communities. It will help fast track research into action to improve outcomes in the crucial early years of child development and learning.

We believe the issues raised in this inquiry represent some of the key issues we have identified and which have led us to form the above mentioned collaboration with the Telethon Kids Institute.

We are therefore pleased to provide a response to the Productivity Commission on the National Education Evidence Base. We have responded to the following items which are those Minderoo is most qualified to make comment on;

- Scope of the inquiry;
- Determinants of education outcomes;
- Framework for a national evidence base; and
- Data sharing.

It is prudent to note at the time of this submission by Minderoo, only one school and a handful of individuals had made a submission to the Inquiry. This may have been a communication issue or the relatively short time frame for the submission process. From Minderoo's perspective it could however be indicative of the need for greater engagement within the education sector on the issue of data as a whole.

Thank you.

Yours sincerely,

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HAYLEY PANETTA



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MINDEROO FOUNDATION SUBMISSION

National Education Evidence Base

25 May 2016

Scope of the inquiry

Does this interpretation of the scope of the terms of reference accord with yours?

Yes.

In particular, should the scope of the evidence base include data on children younger than 4 years old (or prior to the year before compulsory schooling begins)?

Yes. The Minderoo Foundation recommends that the evidence base data should include all data on children from the antenatal period onwards. Further, the importance of including data on all children from the antenatal period onwards is supported in this submission as well as those lodged by Early Start (University of Wollongong), Goodstart Early Learning, the Telethon Kids Institute, Mitchell Institute and the Murdoch Children's Research Institute.

If so, why?

"The evidence base demonstrates that the basis of a happy, healthy and productive life is laid down in utero and in the first three years of life (Center on the Developing Child, 2010, Royal Australian College of Physicians, 2006, Silburn et al., 2011, McCain et al., 2007, Center on the Developing Child, 2007). "Virtually every aspect of early human development, from the brain's evolving circuitry to the child's capacity for empathy, is affected by the environments and experiences that are encountered in a cumulative fashion, beginning early in the prenatal period and extending throughout the early childhood years" (Phillips and Shonkoff, 2000). Quality early childhood education and care has been demonstrated to improve outcomes for children, particularly those who are disadvantaged (Belsky et al., 2007, Burger, 2010)."

And should it cover all children, or only those attending early childhood education and care programs outside the home?

Data available from all sectors that reach children should therefore be included in the national education evidence base. The large number of stakeholders across multiple Federal and State/Territory Departments, the private and community sectors delivering services to children and families, means there is considerable variation as to what is meant by 'early childhood education and care' and the relative value placed upon 'education' and 'care'.

Early childhood education is catered for in so far as it is now embedded into practice through the Early Years Learning Framework and the National Quality Framework. Other forms of



early childhood education including playgroups and mobile services are not covered by the National Quality Framework for valid reasons and also precluded from mainstream childcare funding. 'Care' is covered through child care framework and specifically the Jobs for Families Child Care Package.

"Early childhood education and care therefore includes playgroups as well as licensed long day care (Harrison et al., 2011). Both have positive effects on early childhood development (Hancock et al., 2012, Belsky et al., 2007) and thus must be included in the evidence base data.

As educational data will not be available for children who do not attend formal care services, the ability to link data that is available prior to their enrolment in school will be important. These data are most likely to be maternal, paternal, infant and child health data as well as environmental and community data. It is important that the child assessments administered during school enrolment be improved, particularly for those children for whom there are limited data available from earlier in their lives. These children are also more likely to be from the most disadvantaged families. The types of information to be recorded should, where possible, encompass their attendance at early childhood education and care programs (including playgroups), parenting programs, health data including birth outcomes, and demographic data including family composition. The inclusion of a measure of school readiness would be useful." ⁱⁱ

Determinants of education outcomes

Do you agree that the objective of a national education evidence base should be to improve education outcomes? Are there other objectives that should be included?

The Minderoo Foundation recommends the government broadens its objectives to reflect the whole of child approach required when assessing the progress of a child under the age of five.

As detailed in the submission by the Telethon Kids Institute,

"the evidence base should be placed within the context of a child outcomes framework (using a program logic approach), including a specific focus on vulnerable children. The need to embed the national education evidence base within a broader child outcomes framework is supported in this submission as well as those lodged by Early Start (University of Wollongong), Goodstart Early Learning and the Telethon Kids Institute. The Institute recommends that a program logic approach be applied to developing a child outcomes framework with the child at the centre. A program logic approach provides a chain of reasoning and a theoretical model for defining the interrelated components of a project that are required for its success.



A program logic will:

- ensure that the objectives and outcomes are made clear;
- make explicit the causal pathways and the link between objectives, inputs, activities, outputs and outcomes (short, medium and long term);
- nominate measures against each of these including identifying the existing datasets and their measures;
- provide a framework for evaluation;
- map the impact of external and internal determinants; and
- identify how the system can respond to external determinants. These external determinants can reinforce educational outcomes (both positive and negative) across generations (Hancock et al., 2016).

Including a set of guiding principles would be helpful. Both of the frameworks referenced below contain guiding principles which underpin them.”ⁱⁱⁱ

What education outcomes do you see as relevant? For example, outcomes in traditional academic domains (such as literacy and numeracy), outcomes in non-cognitive domains (such as communication and interpersonal skills).

The Minderoo Foundation recommends that the Commission employ a broad definition of outcomes. “Outcomes should include non-academic outcomes such as health and social and emotional development and early childhood development. This will necessitate linkage with datasets outside of the education sector. Education does not occur in isolation. This is shown by Bronfenbrenner’s ecological model of childhood development which helps to graphically represent the integrated lives of children as a systems model (Bronfenbrenner, 1979). A broad definition of outcomes is supported in this submission as well as those lodged by Early Start (University of Wollongong), Goodstart Early Learning, Mitchell Institute, the Murdoch Children’s Research Institute and the Telethon Kids Institute.

Multiple events and circumstances typically propel children towards educational and social failure (Jenson and Fraser, 2011). Comprehensive, linked data are instrumental to understand these external determinants at a population level and inform the development of appropriate policy responses. Prevention, early intervention and treatment interventions are all required. At the school level, understanding the needs of individual students will enable the school to support these children appropriately.”^{iv}

Framework for a national evidence base

What data should be collected nationally?



According to the Telethon Kids Institute, “the current reliance on AEDC and NAPLAN data has limitations. The AEDC, is a cross-sectional population level tool. Individual children cannot be tracked over time in all jurisdictions for AEDC and NAPLAN. Further, if children are absent on the testing day their results are not included. Depending on the child’s circumstances on the day, their mood and the level of pressure they experience, their performance may not be representative of their actual literacy and numeracy levels. The recently released Grattan Institute paper suggests an improved method for reporting on NAPLAN results that focuses on ‘years of progress’ rather than raw test scores (Goss et al., 2016, Goss, 2016). The absence of data measuring children’s social and emotional development and lack of a national approach (below the AEDC testing age of 5 years) represents a significant gap.”^v

With more effective data capacity Minderoo believes communities and policy makers would be better equipped to make decisions in targeting service delivery and developing a system of proportional universalism.

What characteristics should the data possess in order to support the processes of monitoring progress, evaluating policies and programs and/or informing policy development?

There is a need for data that is longitudinal, and identifiable, to enable linkage across multiple datasets. Additionally, there is a need to capture and analyse data in real time. Both of these needs are supported in this submission as well as those lodged by Early Start (University of Wollongong), the Mitchell Institute and Telethon Kids Institute. Goodstart Early Learning’s submission is also supportive of the need for longitudinal data. Minderoo’s partner the Telethon Kids Institute has also highlighted the considerable time lag in accessing data (up to two years) which prevents timely and effective analysis.

What costs are associated with collecting and administering the data?

Service providers currently bear the cost of collecting data. “Funding for this work is generally not built into government contracts however, failure to produce the data can result in contractual penalties or even termination. This lack of resourcing is particularly acute in the early childhood education and care sector which operates on tight margins and generally has limited administrative support compared to schools.”^{vi}

Issues and opportunities

What are the main challenges and impediments to implementing data linkage in the education sector?

Minderoo agrees with the Telethon Kids Institute that there are a number of opportunities within the early childhood education and care sector:

- “Existing data can be better linked



- Existing data collections can be updated to provide greater detail at the individual level
- Improvements under the National Quality Framework can be better analysed and reported and
- Capabilities of the sector in data collection and use can be enhanced.”^{vii}

Are these challenges and impediments different from other sectors?

Yes.

If yes, how?

According to the Telethon Kids Institute and with the exception of data on social and emotional development, there is a large amount of education data currently available. Some key datasets that could be more effectively linked include:

- “Early childhood data
 - AEDC
 - Data drawn from the Child Care Management System used to administer existing child care subsidies (Child Care Benefit and Child Care Rebate)
 - Administrative data from licensed long day care services, family day care services and playgroups (much of which feeds into the Child Care Management System)
 - Data drawn from the new IT arrangements under the Jobs for Families Package once fully implemented in July 2018 (Child Care Subsidy and the elements of the Child Care Safety Package: Additional Child Care Subsidy, Community Child Care Fund, Inclusion Support Programme)
 - Data on the assessment and rating of licensed long day care and family day care services
- Data from the Department of Social Services
 - Data from Family Tax Benefits A and B
 - FOFMS (and its replacement) used by the Department of Social Services to record information on services it contracts out
 - Requiring the data currently collected by the Department of Social Services through its Data Exchange (DEX) (Department of Social Services, 2016a) to be linked to other key datasets rather than only being used internally
- Medicare data”^{viii}



There are number of challenges described in the submission by the Telethon Kids Institute which Minderoo refers the Commissioners to.

How could governance and/or institutional arrangements impacting on data collection and access be streamlined or otherwise improved to enable better cooperation among stakeholders for the delivery of education information?

Minderoo's experience at the ground level has demonstrated that simplifying the consent process is effective and ethical in enabling greater data sharing and access. One of Minderoo's partners uses a simple one page consent form that parents sign once and provides the option to select all of the service providers that may be involved in the care of their child. These providers are then able to plan and coordinate a holistic case management approach to a child and family.

How do parents use the data provided on My School? How has My School affected parents' engagement with schools?

In the [Creating Parity: Forrest Review](#) delivered by Minderoo Foundation chairman Andrew Forrest to then Prime Minister the Hon Tony Abbott, recommendations were made regarding the use of data for public access. Specifically, in Recommendation 2, the following was recommended:

2.1 Within 12 months state and territory governments should adopt the following measures to improve school attendance:

2.1.1 implement existing truancy regulations to improve school attendance levels and achieve the 80% minimum tolerance required for an effective education. Regularly report and publicise their truancy record on the My School and CreatingParity websites

2.1.2 ensure schools that fall below the minimum tolerance of 80% attendance (subject to upward adjustment) have an enforceable plan on how to reach parity in attendance for first Australians with progress on these plans to be reported on the My School and CreatingParity websites

2.1.3 provide simple, cost-effective systems to schools that support monitoring attendance and parental engagement and build attendance to 90%

2.1.4 collect and provide school attendance data that accurately measure the attendance of each student and provide this to the Commonwealth at the end of each school term

2.1.5 have ministerial executive accountability for results of truancy enforcement and school attendance reported through to the CreatingParity website.

2.2 The Commonwealth Government should introduce a new mutual obligation requirement for parents to ensure that children attend school in return for receiving the Family Tax Benefit. The target



attendance should be initially set at least 80%, with a later target of 90% of the school year. The Commonwealth must take the following implementation steps:

2.2.1 amend the application form for the FTB to make clear the benefit is paid to enable parents to raise their children and send them to school every day and to include a requirement for applicants to acknowledge and give permission to check education attendance records

2.2.2 change the FTB payment from an annual entitlement (that is currently assessed annually and paid fortnightly) to a more regular monthly entitlement to enable validation of school attendance data for each child, with the data shared by states and territories (see recommendation 1), and evidence submitted through a simple, electronic system

2.2.3 apply financial penalties to those parents whose children fall below the benchmark of 90% attendance for the school year and report the aggregate data on the CreatingParity website.

2.3 In support of the efforts by states and territories to improve school attendance, the Commonwealth should pay school education funding to them based on actual attendance rates, with data published regularly and support case management services provided for students and families with particular challenges, and revise ABSTUDY and supports to access boarding schools. This will be achieved by the Commonwealth Government taking the following implementation steps:

2.3.1 paying schools funding to state and territory governments based on actual attendance rates measured at the end of each term

2.3.2 publishing updated attendance data on the My School and CreatingParity websites each month clearly indicating whether attendance levels of over 80% have been achieved and tracking individual school trends over time

2.3.3 restructuring the School Enrolment and Attendance Measure to be part of the intensive early childhood approach (see recommendation 1) and enabling the early childhood case manager to implement a support and attendance plan for prenatal to primary school age attendance for individual families. This should include enabling the case manager—rather than Centrelink—to determine if the penalty should be applied. This determination can only be made by the case manager in the long-term interests of the client and not by the Centrelink officer

2.3.4 better targeting ABSTUDY by simplifying its administration, rewarding completion and making it available to first Australian students from remote communities who board on a weekly basis. Changes need to be made to:

2.3.4.1 ensure ABSTUDY is quick and easy to apply for and that it is sufficient to cover the full costs of students attending boarding schools from remote communities

2.3.4.2 give families with children at boarding schools access to base rate FTB payments during school vacations and ABSTUDY payments for the school term until they finish Year 12 in recognition of the costs parents incur during the vacation periods



2.3.4.3 establish regionally-based services to provide independent and professional advice, including placement and retention assistance on education and training options outside their community to families and students.

In summary, Recommendation 2 highlights the need to collect additional data and for it to be accessible to the community through publishing on existing platforms such as the *My School* website. Minderoo believes this would make services more accountable for student outcomes, empower communities to make informed decisions about the services they utilise and make better use of tax payer funds.

Data sharing

What lessons can be learnt from previous data linkage efforts, in the education and other sectors (e.g. health care, social services) and from other countries?

The recognition that establishment of data linkage can take considerable time and succeed largely through positive relations is supported in this submission as well as that lodged by the Telethon Kids Institute. The submission by the Telethon Kids Institute provides examples of the challenges (with key issues being the ethics approval process and need to obtain data custodian approval) and lessons that can be learnt.

Data capture, processing and management

Is a fear of exposing program failure a serious impediment to data development and use?

As a philanthropic entity (not service provider) Minderoo's experience with partners working on the ground, is that increased use of data is daunting for most partners. Both the Telethon Kids and Institute and the Life Course Centre's submissions concur that fear of exposure of program failure is a serious impediment to data development and use.

What can be done to overcome this?

Minderoo believes investment is needed to develop more user friendly platforms for data collection and analysis. In Minderoo's experience, many partners use very rudimentary approaches to data and thus do not have the capacity to demonstrate outcomes as opposed to outputs. It is also recommended that governments support providers in a shift to outcome rather than output collection by recognising the difficulty in achieving impact as well as measuring it.



Analytical and research capability

How effective have the different jurisdictional approaches to facilitating education research been in building research capacity?

It is currently unfair to expect those within the education sector to possess the capacity to collect, analyse and implement data findings. Undergraduate teaching courses for example, do not enable teachers to develop research capabilities. As discussed by the Grattan Institute in its recent work, teaching practice and student outcomes could be significantly enhanced if data was more prominently driving what goes on inside our classrooms^{ix}. However educators must first be equipped to undertake this work and a greater emphasis on evidence should be mandated throughout the sector.

ⁱ Used with permission from the Telethon Kids Institute.

ⁱⁱ Used with permission from the Telethon Kids Institute.

ⁱⁱⁱ Used with permission from the Telethon Kids Institute.

^{iv} Used with permission from the Telethon Kids Institute.

^v Used with permission from the Telethon Kids Institute.

^{vi} Used with permission from the Telethon Kids Institute.

^{vii} Used with permission from the Telethon Kids Institute.

^{viii} Used with permission from the Telethon Kids Institute.

^{ix} Peter Goss and Jordana Hunter, 2015, *Targeted teaching: How better use of data can improve student learning*, accessed from <http://grattan.edu.au/wp-content/uploads/2015/07/827-Targeted-Teaching.pdf>