May 25, 2016

Commissioner Coppel
Presiding Commissioner, Education Evidence Base Inquiry
Productivity Commission
Australian Government

Dear Commissioner Coppel

Thank you for the opportunity to lodge the attached submission to the Productivity Commission's 2016 Inquiry into the Education Evidence Base.

Members of the Research Institute for Professional Practice, Learning and Education at Charles Sturt University who contributed to discussions underpinning this submission include:

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The submission was also informed by a roundtable discussion convened by Early Childhood Australia and hosted by the Murdoch Children's Research Institute.

Kind regards

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Submission to the Productivity Commission Inquiry into the National Education Evidence Base

The Research Institute of Professional Practice, Learning and Education (RIPPLE) is one of six University Research Centres at Charles Sturt University. Its research program addresses education-related problems from interdisciplinary perspectives. RIPPLE has particularly strong expertise in early years education research.

We welcome the opportunity to respond to the Productivity Commission Inquiry into the National Education Evidence Base, and commend its focus on identifying ways to further develop a national approach to collecting and using data to improve Australia's educational outcomes. The Inquiry presents an important opportunity to garner the commitment and resources needed to build a comprehensive, consistent, but locally-relevant, evidence base to inform decision-making for education policy and practice at all levels.

The focus of our submission is on strengthening the evidence base for early childhood education and care (ECEC). We note with some surprise the inclusion of the question in the Commission's Issues Paper:

> *…. 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)? …. (p. 3).*

Given the widely recognised foundational importance of the period from birth to three years[1], we believe that the response to this question must be an unequivocal 'yes'. Indeed, it is inconceivable that a comprehensive and robust evidence base not include children under 4 years of age. Our submission proceeds on this assumption.

We see the following as critical to strengthening the evidence base concerning ECEC, but consider the general principles also relevant to all levels of education:

1. **Maximising the impact of massive social investment in early childhood education and care by the Australian government, and to a lesser extent state and territory jurisdictions, requires strong, parallel investment in research and evaluation.**

Investment in high quality early childhood education and care provides significant national social and economic benefits, as the Commission emphasised in its earlier Reports on the Early Childhood Development Workforce Childcare[2] and Childcare and Early Learning[3]. Yet how to optimise that investment is far less clear, given that there is still only a relatively limited Australian evidence-base to inform policy decision-making.

As a consequence, there has been a strong reliance on international evidence that is often dated, or not directly transferable to the Australian context, as noted by the Commission in its Childcare and Early Learning Report (2014)[3]. The Commission drew particular attention to the lack of Australian evidence about whether there is a relationship between staff qualifications and outcomes for children aged under 3 years in ECEC settings. Citing this lack of evidence, the Commission recommended lowering the current qualification requirements for early childhood educators working with children aged under 3 years, that had been agreed as part of the Council of Australian Government's National Partnership Agreement on National Quality Agenda for Early Childhood Education (http://www.federalfinancialrelations.gov.au/content/npa/education/early_childhood/quality_agenda/national_partnership.pdf).

This was a contentious recommendation, particularly as Warren and Haisken-DeNew (2013)[4], using data from the Longitudinal Study of Australian Children (LSAC), found that children whose educators (in 2004) had a relevant degree or diploma qualification obtained significantly higher NAPLAN scores for Numeracy, Reading and Spelling (in 2008).

The lack of definitive Australian evidence means that no firm conclusions can be drawn about optimal qualification requirements for educators of children aged under 3 years. Nevertheless, longitudinal studies conducted in Australia[5] and overseas[6] clearly demonstrate that the learning outcomes observed in very young children will influence their outcomes as pre-schoolers, and subsequently their achievement at school. Research also shows that high quality early childhood programs in the year prior to school can have short- and long-term positive outcomes for children[7].

Australian evidence pertaining to the quality of education and care programs in the prior-to-school years is also patchy and inconclusive. Only a handful of studies have included standardised measures of quality. Studies conducted in NSW, which has a long history of requiring Diploma and degree qualified educator educators across preschool and child care services, have reported higher ratings on an internationally recognised measure of quality[8,9], than studies conducted in QLD and VIC[10], states that have only recently adopted requirements for qualified staff across all early childhood services.

High-stake decisions made in the absence of comprehensive Australian evidence, therefore, can lead to misjudged policy settings with far-reaching adverse implications. Conversely, building a stronger evidence base provides a way of optimising returns on investments for the benefit of future generations.

2. A National Education Data Strategy, that includes a strong focus on children from birth (or prior to birth), is needed with a focus on ensuring that data is high-quality, linked, available, accessible, local, timely and usable[1]

As listed in the Commission's Issues Paper (pp. 14-15), Australia has produced several valuable existing large data sets pertinent to the early childhood years; although notably missing from the list is the rapidly growing data set of Australian Children's Education and Care Quality Authority (ACEQA) that reports ratings for a number of quality indicators for government funded early childhood education and care services. A truly comprehensive data set will be difficult to achieve, however, given that Australia has neither a universal ECEC system, available to all children and families, nor, with the arguable exception of immunisation, a universal health system covering the early years.

In light of these structural limitations, a national education data strategy is essential. Its brief should include:

i) maximising the utility of existing data sets, for instance by making available data and the analysis of data, at national, state, regional and local levels, and in formats that are easily accessible by a wide range of users. A good model is the presentation of the Australian Early Development Census (AEDC) data. It is critical that data be made available as soon as possible, so that it can be used in a timely way to inform policy and practice.

ii) identifying ways to link existing data sets; prioritising which data sets should be linked in the short, medium and long term; and ensuring that the capacity for linkages is built into the design of all new data sets. Of crucial importance is the need for consistent definition / use of terms (e.g., 'preschool program') across all data collections by the Commonwealth, State and Territory governments, and other organisations.

iii) advising on the need for new data sets (including 'boutique' data sets, e.g., as generated by the *E4Kids* Project (http://education.unimelb.edu.au/news_and_activities/projects/E4Kids); and / or the extension of existing data sets, such as LSAC, through the addition of new cohorts. It is salutary that the children in

[1] This point was made by Dr Stacey Fox, Mitchell Institute, to the ECA Symposium held in Melbourne, May 18, 2016.

the infant cohort of LSAC (aged birth – 1 year in 2004) are now aged 12-13 years. Given the many changes to ECEC resulting from the introduction of the National Quality Framework during the period 2009-2012, there are persuasive arguments as to why the inclusion of a new infant cohort would be beneficial. We note, however, that a new cohort offers opportunities for a new design, rather than a mere replication of the 2014 study. In particular, we recommend that attention be given to the much larger and more comprehensive *Growing Up in New Zealand* (GUNZ) study. GUNZ recruited a much larger sample of infants and collected data at tighter age-intervals than LSAC.

iv) ensuring that data collection is purposeful, and fit for purpose – in particular that it recognises the complexity and interrelatedness of educational, health and well-being outcomes for young children, and the importance of 'non cognitive' outcomes as well as cognitive achievements.

v) establishing robust governance mechanisms that would involve the appointment of a lead or coordinating agency which is independent from government. This proposed agency would act as a repository of data; enable streamlined access; and issue regular reports. It would also take an oversight role in preserving the integrity of data sets. [It seems short-sighted, for example, that the forthcoming National Early Childhood Education and Care Workforce Census does not include questions about early childhood educators' satisfaction and career intentions asked in the previous Census, even though ECEC workforce retention remains a pressing policy problem.] We believe that this independent approach will enable the development of a more systematic evidence base, and a more systematic, evidence-informed approach to the formulation of public policy.

vi) Securing cross-jurisdictional buy-in (e.g., to the use of common terms) and long term commitments (e.g., to the continuation of the AEDC data collection), as well as more fundamentally, to the need for evidence-informed policy decision-making.

vii) Identifying and disseminating strategies for building data literacy and analytic capacity in all sectors to ensure access and utilisation of the data by a broad and inclusive range of researchers and institutions. In relation to capacity, for example, the RIPPLE-led Excellence in Research in Early Years Education Collaborative Research Network (ER-EYE CRN), which brought together approximately 70 early childhood researchers and PhD candidates from Charles Sturt University, Queensland University and Monash University had a major focus on building capacity in understanding and using quantitative data in research through the use of the LSAC and Longitudinal Study of Indigenous Children (LSIC) data sets. Over a period of 4 years, the number of members of the ER-EYE CRN utilizing these datasets increased from 9 to 26 (a 3-fold increase) and achieved a similar increase in the number of LSAC/LSIC related publications (from 11 prior to 2011 to over 30 by 2015/16).

Importantly, if a national data strategy is to be effective, it must be well resourced. Driving high quality data linkage, analysis, dissemination and building capacity in data literacy and analysis will be major undertakings.

3. A national data strategy must be accompanied by commitment to a comprehensive research plan

To continue to build a strong education evidence base, the development and resourcing of an ongoing comprehensive research plan is essential. In the absence of such a plan, the education evidence base is likely to remain piece-meal. We note that the recent National Science and Research Priorities which have a very significant

focus on science, technology, engineering and mathematics (STEM) education must not be pursued at the expense of other education-focused needs.

The lack of commitment to education research focusing on the ECEC and school sectors more broadly, is a long-standing concern. It is disappointing, for example, that there was no follow through on the Commonwealth government's earlier commissioning of the Australian Research Alliance for Children and Youth (ARACY) to identify key research gaps to inform a national research agenda for early childhood education and care[11]. Similarly, despite sustained efforts, the Australian Council of Deans of Education and the Australian Association for Research in Education have been unable to gain a commitment to the establishment of an equivalent dedicated research funding for the ECEC and school sectors, of the kind provided by the National Centre for Vocational Education Research.

If all areas of education are not to be explicitly included in national research priorities, a dedicated funding source for education research is essential.

It should prioritise:

i) policy-relevant research (including research that can proactively drive policy agendas, not simply respond to policy agendas);

ii) addressing agreed upon knowledge gaps. In relation to ECEC, these include dose/ intensity needed to make a difference (for children and families, and more broadly for returns on investment); the degree to which indicators of quality education programs (structural and process) are adequately met and ensure that objectives for child outcomes will be achieved; the policy settings needed to attract and retain a skilled and committed ECEC workforce;

iii) complementary suites of studies and research designs (e.g., longitudinal, experimental, descriptive case studies) that can build a systematic, cumulative and cost effective evidence base.

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