

The Productivity Commission Inquiry into Early Childhood Education & Care Report

> Submission on the Report from the Centre for Research in Early Childhood Education,

Macquarie School of Education, Faculty of Arts

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Centre for Research in Early Childhood Education

About the Centre for Research in Early Childhood Education

<u>The Centre for Research in Early Childhood Education</u> (CRECE) brings together a critical mass of early childhood education researchers from Macquarie University who work together with the early childhood community to co-design and conduct innovative, impactful research. CRECE is part of Macquarie School of Education which is ranked 93rd in the world for Education, according to Times Higher Education rankings, and ranked as Australia's leading Early Childhood Education institution by *The Australian* in 2022.

Overview

We thank the Australian Government, via the Productivity Commission, for undertaking this inquiry into the early childhood education and care (ECEC) sector. By and large there is much to be pleased about in the Commission's Report for the future of ECEC in Australia and its place in supporting the learning, development and wellbeing of children, and their families.

We value the opportunity to respond to the Commission's Report. We trust that our constructive feedback on the Report contributes to recommendations going forward that will support affordable, accessible, equitable and high-quality ECEC, that supports the learning, development and wellbeing of all children living in Australia - regardless of who they are – and supports families, including reducing barriers to their workforce participation.

In our response we have focused primarily on how the Commission's Report has addressed recommendations made by us in our submission to the Commission in 2023. These recommendations were based on concerns and understandings identified in Australian and international research literature about major issues in the current provision of ECEC in Australia and more broadly. In addition, we have provided feedback on recommendations made by the Commission.

Our responses fall under eight areas:

- 1. A Child Entitlement Lens
- 2. Recommendation for 30 hours of subsidised care
- 3. Focus on Quality
- 4. Infant and Toddler ECEC
 - 4.1. Ensuring quality for infant-toddler ECEC
 - 4.2. Ensuring adequate funding for quality infant-toddler ECEC

5. Supporting equitable access for children living in regional / remote and low-socioeconomic areas

6. A Focus on the ECEC Workforce

6.1. Reducing Barriers to Initial Educator and Teacher Training & Upskilling

- 6.2. Attention to ECEC Educator Pay & Conditions
- 6.3. Supporting Educators through Mentoring and Clinical Supervision
- 7. Support for Interprofessional Practice
- 8. Proposal for an ECEC Commission

We welcome questions and further discussion about any of the points raised.

1. Child Entitlement Lens

We strongly commend the Productivity Commission for placing children as the priority in their response, and especially the positioning of the child's experience, wellbeing and learning at the forefront of the report and its recommendations. It is pleasing to see a focus on both the short-term and long-term benefits of quality ECEC for children recognised in the Report. We are particularly pleased to support the policy shift to the concept of *children's entitlement to ECEC* – and see this as a step towards enshrining access to ECEC as a child's *right*.

2. Recommendation of 30 hours of subsidised care

We note that the Commission's recommendation is for 30 hours of subsidised care. This is an increase on current support. We are of the opinion that 30 hours of subsidised care would benefit many children. However, *vulnerable and marginalised children must be prioritised*.

Nevertheless, there remains, little evidence to substantiate the threshold number of hours (dosage) of ECEC required to reap the benefits for children across different ages or circumstances, or the regularity of those hours (Burchinel, et al., 2016; Ehrlich et al., 2018, Infurno & Montes, 2020). The duration of attendance is of particular concern for children under 12 months of age. *Australia urgently needs research around the optimal dosage and pattern of delivery of ECEC*.

Further, *care needs to be taken around how those hours are expected to be delivered* (e.g. how many hours per day) without undue burden or unintended negative impact on children's services (as happened with the introduction of 14 hours of preschool). For example, what will be the impact on pre-school delivery? Would it be possible to split hours across services – say between pre-school and family day care?

We strongly argue that entitlement for ECEC *be extended to all children in Australia* – *regardless of their visa status.* This means that children from refugee and asylum seeker families also require Government support - as was recognised during the free period allowed during the midst of the COVID-19 epidemic (PC Report, 2023, p.386). These are some of the most vulnerable of children, for whom ECEC can make a particularly significant contribution to their learning, development and wellbeing both in the immediate and long term (Lamb, 2020, Tobin, 2020). We argue that this is essential to fulfil Australia's obligation under the United Nations Convention on the Rights of the Child including to ensure that "In all actions concerning children … the best interests of **each** child shall be a primary consideration" (United Nations, 1990, emphasis added).

3. Focus on Quality

We strongly commend the Productivity Commission for foregrounding of the *importance of* the quality of ECEC, and especially for maintaining the integrity of the National Quality *Framework*. These views are based on an accumulating body of Australian and International research including large-scale evaluations of programs targeted for disadvantaged children (e.g. Head Start, Abecedarian and High/Scope Perry Preschool programs). These studies provide compelling evidence that attendance at *high-quality* ECEC services can have positive effects on children's social, cognitive, language and physical development and school readiness (see for example: Bellfield et al, 2006; Berger et al., 2021; Cornelissen, 2018; Felfe & Lalive, 2018; Felfe & Zierow, 2018; Melhuish, & Gardner, 2020). Where quality is low – this can have adverse effects on children's wellbeing. As Kuehnle and Oberfichtner (2020, p.61) state, "Simply allowing children to start universal childcare earlier is ... not sufficient to improve children's skill development ..." the quality of the services they attend must be sufficiently high. That is, whereas short exposure to high quality programs can be positive for children's outcomes - the longer children are exposed to low quality care, the poorer are their outcomes – especially in regard to social and behavioural areas. Quality provision, therefore, is the key. In Australia we have an excellent system for assessing quality through the National Quality Framework.

4. Infant and Toddler ECEC

We commend the Commission for recommending universal access for **all** children birth to five years. As the draft report clearly states, a significant proportion of Australian children attend ECEC in their first years of life. In a context where universal access has largely been limited to debates about the one or two years before entry into formal schooling, the clear focus on ECEC services for infants and toddlers is applauded.

Not only is access to infant-toddler ECEC critical for parents' workforce participation, but there is a growing body of international research indicating that the provision of highquality infant-toddler ECEC has long-reaching effects on children's outcomes, especially for those experiencing disadvantage. The well-known NICHD study from the US reports a positive effect of attendance in high quality infant-toddler programs on cognitive, language and social-emotional development at age 15 (Li et al., 2013; Vandell et al., 2010). More recent longitudinal analyses support the value of infant-toddler ECEC participation. For example, when compared with children who did not attend a high quality Educare service in the US, those who attended Educare before the age of three had better language and cognitive outcomes at school entry and in Grade 3 (Horm et al., 2022; Yazejian et al., 2017). What is clear from this, and other international research (e.g., Choi et al., 2016; Côté et al., 2013; Hooper & Hallam, 2017), is that the quality of programs for children birth to three must receive critical attention to ensure that the positive outcomes associated with ECEC participation more broadly are realised. With this in mind, we **raise two cautions** that we believe must be considered with relation to the recommendation for universal access for all children. In contexts where universal access focusses only on 'pre-k' for children aged 3-5 years, concerns have been raised for its potential to be detrimental to services and programs for children birth to three. For example, Brown (2018) reports that the provision of universal pre-K provision in the United States reduced the provision of programs for infants and toddlers; an effect that was particularly severe in financially disadvantaged areas. In the Australian context, State and Territory reforms are largely focussed on access for 3-5 year olds. So **unless an Australiawide policy focus is on ensuring high quality provision for all children birth to five years, the risk remains that infants and toddlers could be disadvantaged.**

4.1. Ensuring quality for infant-toddler ECEC

The first caution revolves around the *imperative that infant-toddler ECEC provision is of high quality.* With the exception of the data from the Longitudinal Study of Australian Children (LSAC) we currently have no consistent way of tracking the long-term impact of quality in infant-toddler programs on children's outcomes nation-wide. However, Australian research investigating quality indicators has shown that birth to two programs lead by a university qualified teacher demonstrate higher quality interactions, particularly in the area of language and cognitive stimulation, than those programs without an early childhood teacher (Degotardi, 2010; Degotardi, Han, et al., 2018; Degotardi, Torr, et al., 2018; Degotardi et al., 2016; Han & Degotardi, 2021; Hu, Degotardi, et al., 2019; Hu, Torr, et al., 2019) . Group size has also been negatively linked to interaction quality (Degotardi, Han, et al., 2018; Zheng et al., 2023).

Moreover, the Australian policy context currently does not pay sufficient attention to infanttoddler program quality. The current universal access requirement to have 'preschool' programs delivered by a degree qualified teacher, and the absence of a similar requirement with younger children means that relatively few infant-toddler programs are led by a university qualified teacher. This lack of policy attention is evident in the regulated early childhood teacher degree qualification requirement for professional experience with children aged birth to two, which mandates fewer professional experience days than those required for preschool-aged children. Furthermore, evidence suggests that explicit degree content related to infants and toddlers is also relatively neglected (Garvis et al., 2013; Garvis & Manning, 2015), which not only discourages teachers from wanting to work with very young children but also raises questions about the capacity of degree-qualified teachers to ensure that a high quality program is delivered (for further insights about career intentions of education student teachers (see submission response from Fenech et al.)

4.2. Ensuring adequate funding for quality infant-toddler ECEC

The second caution relates to the fact that high quality infant-toddler ECEC requires assurance of adequate funding. Regulated lower child:educator ratios for infants and toddlers, compared to the required ratios for preschoolers, lead services offering ECEC for children birth to five to either charge higher fees for the younger age group or subsidise their infant-toddler programs through their preschool provision. If universal access does not include provisions to ensure that birth to three provision is not economically disadvantaged, we run the risk of ECEC services becoming economically unviable (Bassok et al., 2016; Brown, 2018). That is, if services with infant-toddler programs are 'squeezed' economically by universal access provisions, the quality of infant-toddler programs may be the first to suffer.

Therefore, while fully supporting the recommendation of 30 hours of universal access for all children, we also recommend that policy reform be considered to **ensure equity of quality ECEC for all children from Birth to Five years age**. This would include a review of staff qualifications and group size requirements for infants and toddlers as well as a review of infant-toddler specific content in both ECEC degree and vocational qualifications. It would also include economic provisions to ensure that services providing infant-toddler programs are not economically disadvantaged for doing so.

5. Supporting equitable access for children living in regional / remote and low-socioeconomic areas

We commend the Commission for considering the particular challenge of ensuring equitable access for children living in regional / remote and low-socio-economic areas - in particular, the Commission's recommendation for funding to support fees, and address barriers to ECEC attendance. We note, however, that recent Australian research has identified that the challenges facing ECEC services differ across different levels of isolation (Wong et al, 2023). And we argue that a nuanced and targeted approach is taken to address the diverse challenges existing in regional, remote and very remote areas.

Further, *more could be done to realise the importance of engagement and collaboration with local communities.* Operational funding is essential to enable teachers/Directors to promote the benefits of ECE in communities and to develop and deliver locally relevant strategies to encourage enrolment and attendance (see Harrison et al. 2022; Harrison et al. 2023 <u>report on the Supporting Participation in Early Childhood Education</u> project).

The importance of supporting the engagement and collaboration with local communities could be addressed by an expansion of the Commission's Report Recommendations 3.4 and 3.6 related to *mentoring and support for new early childhood teachers.* In particular, we recommend expanding the funding allocated to the professional learning needs of teachers

and Centre Directors working in remote, disadvantaged and low socio-economic status communities, by targeting teachers in their first three years after graduation.

Recommendation 6.3 and finding 6.2 are also highly relevant to addressing barriers to ECEC enrolment and attendance in remote and low SES communities. The SPiECE research study conducted by a team of researchers from Macquarie University shows that children and families *benefit from support from trusted ECEC Directors* when they have difficulties with the system. That is, by building trusting relationships with families, directors can assist families navigate the CCS and enrolment systems, resulting in higher rates of attendance by the children (see Harrison et al, 2023).

We also considered children's access to ECEC in remote and low SES communities in relation to Recommendation 7.2. We are highly supportive of the Commission's recognition of the *importance of playgroups within the ECEC sector*. Playgroups can be a segue into ECEC services for families particularly in relation to the benefits for their younger children. Playgroups that are co-located with ECEC services or schools can promote continuity with the ECEC sector, for children, families and the ECEC workforce.

6. A Focus on the ECEC Workforce

We commend the Commission for focusing on the ECEC workforce. The report attends to many of the key challenges to having a stable, well-qualified workforce. However, it **does not clearly connect teachers' and educators' specialised skills, knowledge, understandings and well-being with overall quality**. As stated in the National Workforce Strategy: "Quality outcomes for children depend upon a highly skilled, well supported and professionally recognised workforce" (p. 4). Further, a 2019 meta-analytic review of "correlations between teacher qualifications and ECE environment quality" found that "higher teacher qualifications are significantly correlated with higher quality ECEC environments" at both overall and subscale levels (Manning et al., 2019, p. 370).

The current workforce shortages therefore not only threaten supply of ECEC places but may also threaten the quality of provision as existing staff within each level of the early childhood teacher workforce ecosystem, while also pointing to the complex and dynamic interplay across levels. This suggestion expands on the recognition of the Commission for the necessity of: "associated financial and workplace supports" (p. 2) in support of a coordinated approach to workforce reforms and supports.

The Commission report adequately acknowledges the *need for ongoing professional development and mentoring* during initial preparation for both teachers and educators as well as those currently employed in ECEC settings. Three areas where we believe the Commission's Report could be strengthened in relation to the workforce are outlined below:

6.1. Reducing Barriers to Initial Educator and Teacher Training & Upskilling

Reducing barriers to educator upskilling is essential. The cost of educator and teacher training is a barrier. The draft report acknowledges the necessity of specialised Vocational Education and Training qualifications (p. 216), and that access to "free or very low cost...courses" (p. 217) is <u>currently</u> in place. There is also attention to means of ensuring the quality of this initial teacher and educator education is appropriate. To ensure enough VET-qualified educators are available, it may be useful for the Commission to *recommend some means of guaranteeing ongoing access initiatives until the workforce shortages are stabilised*. This could be part of the remit, for example, of the proposed National Partnership Agreement on Early Childhood Education and Care.

We commend the recommendation to work with universities. The solution needs alignment between ACECQA, National Quality Framework, Australian Qualification Framework and universities with fair and equitable policies expressed clearly using nationally consistent nomenclature. We agree it is essential to incorporate short- and long-term evaluation systems. The **opportunity for universities to deliver innovative teaching qualifications is welcome but must be considered within the context of university policy and systems both of which take time to change**. Likewise, innovations in Professional Experience are also welcome. We ask the early childhood sector to consider the establishment of Professional Experience agreements with universities to decrease administrative burdens and create simplified and consistent processes for placements and other connections. A good example of this in practice already is the NSW Department of Education – <u>Professional Experience</u> <u>Hub Schools</u>. Implementing a similar system in the early childhood sector has potential to create benefits for early childhood education and care services, early childhood teacher education students and universities.

6.2. Attention to ECEC Educator Pay & Conditions

The Commission has rightly recognised that "the pay and conditions offered to the ECEC workforce ...are critical for recruitment and retention [and] may be improved through processes arising out of recent changes to the Fair Work Act" (p. 2). Further, that there is a need for further stewardship by Australian, state and territory governments alongside industrial relations processes to redress workforce challenges.

Findings from the report submitted by Degotardi et al. (2023, embargoed) support these statements and illustrate the expectation of employees, employers and sector representatives that government will lead a sustainable solution – that is, pay and conditions can no longer be left to market forces to determine. At the same time, evidence from the report submitted by Degotardi et al. (2023, embargoed) suggests that in a time of extreme ECEC workforce shortages, employers have devised a wide range of innovative ways to improve wages and conditions beyond the requirements of the Fair Work Act. These findings suggest that the Commission could perhaps better recognise the roles of a

wider range of stakeholders in relation to improving wages and conditions in the early childhood workforce. This recognition would put recommendations in line with the National Workforce Strategy, which mentions the interlinked role of "governments, service providers, peak associations and other sector stakeholders" in facilitating "the most effective and sustainable change and an ongoing commitment to progress" (Education Services Australia, 2021, p.7).

Nevertheless, given the changing political will and commitment of governments to the ECEC workforce over time, it could be beneficial for the Commission to specify the expected role of governments in stewardship regarding ECEC staff wages and conditions. We recommend that, the definition of the various ECEC staff' roles should be specified in the proposed National Partnership Agreement on Early Childhood Education and Care, and/ or as a key role of the proposed new independent Early Childhood Education and Care Commission. It will ensure government attention to – and accountability for – improved pay and conditions for the ECEC staff, the cornerstone of quality education provision for Australia's youngest citizens, is honoured. This work is also in keeping with the government's National Workforce Strategy Plan which seeks to ensure a sustainable, high quality ECEC workforce (ACECQA, 2021).

6.3. Supporting Educators through Mentoring and Clinical Supervision

ECE research has consistently demonstrated the value of mentoring in supporting Early Childhood Teachers (Front Project 2019; Waniganayake *et al.* 2023). McDonald et al., (2018) for example, found that even in the absence of universal improvements to pay and conditions ECEC settings fostering clear career pathways and supporting professional identity and belonging promotes longevity. Supporting the EC workforce is key and during the early years of employment successful mentoring relationships for neophytes develops teaching competencies, and teaching identity (Hadley et al, submitted 2024).

There is no acknowledgment, however, of the needs of service directors, for clinical supervision (delivered by a psychologist or equivalent with knowledge of ECEC and external to the employer) as a potential means of supporting their ongoing employment. Recently published papers by Wong et al. (2023) and Wong (2024) suggest that clinical supervision is a promising model especially in areas where families face significant challenges – for which ECE staff provide often extensive emotional support and resourcing – and during and after experiencing natural disaster.

7. Support for Interprofessional Practice

Our recommendations to the Productivity Commision included a statement on the importance of a "focus on interprofessional practice", and "working in partnership with diverse families" in initial teacher and educator education do not appear to have been addressed. There is little reference to interprofessional practice in the Report. The

Commission could consider recommending that ACECQA undertakes a review of "requirements for ECT-level qualification that has been approved by ACECQA for the purposes of meeting the requirements of the National Quality Framework" (p. 236) to take account of these contemporary needs of early childhood practice.

8. Proposal for an ECEC Commission

Finally, we support the development of a new ECEC Commission to oversee investment and planning so that ECEC is provided in places of short supply especially in geographic locations of disadvantage. The movement towards a stewardship model also seems highly appropriate for overseeing Australia's investment in ECEC. It will be essential to ensure that there is a mechanism for all parties who provide ECEC to have a voice on this proposed Commission.

Regarding the proposal that the Commission sets a research agenda, we are broadly supportive of this approach. Australia needs a consolidated, collaborative approach to designing and implementing research that will address the 'wicked' problems facing ECEC, and ensuring ECEC has a productive future. This kind of research needs experts from multiple disciplines to work together, as was the case in the recent Early Childhood Education and Care Pay and Conditions Research led by CRECE. The multidisciplinary team of Macquarie University researchers brought together expertise in early childhood education (ECE), industrial relations, workforce and economic analysis to identify pay and employment conditions that will positively impact the attraction and retention of ECE educators.

One such area of research is the area of the role that ECEC plays as part of the care economy. There are requirements to ensure that services operate productively - balancing quality and cost. However, traditional ideas for increasing productivity are inappropriate for the care economy. **New ideas** (theories) and understandings (research) **about what constitutes 'productivity' in ECEC are required to inform policy**.

Australia has some of the world's leading ECEC researchers. Unfortunately, competitive research grant funding processes work against cross-institutional collaboration. Moreover, there is often unnecessary and costly duplication across jurisdictions. A far more consolidated and nationally coordinated approach is required in moving forward. We are interested to understand how the proposed ECEC commission will articulate with ACECQA and AERO and the various Ministers of Education and Social Services in directing attention to the early years of Australia's young children (Birth to Five years) and their families.

References

- Bassok, D., Miller, L. C., & Galdo, E. (2016). The effects of universal state pre-kindergarten on the child care sector: The case of Florida's voluntary pre-kindergarten program. *Economics of Education Review*, 53, 87-98. https://doi.org/10.1016/j.econedurev.2016.05.004
- Belfield, C.R., Nores, M., Barnett, S., & Schweinhart, L. (2006). The High/Scope Perry Preschool Program: Cost-benefit analysis using data from the age- 40 follow up. *Journal of Human Resources, 41*(1), 162-190.
- Berger, L.M., Panico, L., & Solaz, A. (2021). The impact of center-based childcare attendance on early child development: Evidence from the French Elfe cohort. *Demography*, 58(2):419–450. DOI10.1215/00703370-8977274
- Burchinal, M. Zaslow, M., & Tarullo, L. (Eds) (2016). Quality thresholds, features, and dosage in early care and education: Secondary data analyses of child outcomes (27 45).
 Monographs of the Society for Research in Child Development. Serial No. 321, Vol. 81, No. 2.
- Brown, J. (2018). Does public pre-K have unintended consequences on the child care market for infants and toddlers? *Princeton University Industrial Relations Section Working Paper 626, Available at SSRN: <u>https://ssrn.com/abstract=3360616</u> or <u>http://dx.doi.org/10.2139/ssrn.3360616</u>.*
- Choi, J. Y., Elicker, J., Christ, S. L., & Dobbs-Oates, J. (2016). Predicting growth trajectories in early academic learning: Evidence from growth curve modeling with Head Start children. *Early Childhood Research Quarterly*, *36*, 244-258. <u>https://doi.org/http://dx.doi.org/10.1016/j.ecresq.2015.12.017</u>
- Cornelissen, T., Dustman, C., Raute, A., & Schönberg, U. (2018). Who benefits from universal child care? Estimating marginal returns to early child care attendance. *Journal of Political Economy*, *126*(6), 2356 2409.
- Côté, S. M., Mongeau, C., Japel, C., Xu, Q., Séguin, J. R., & Tremblay, R. E. (2013). Child care quality and cognitive development: Trajectories leading to better preacademic skills. *Child Development, 84*(2), 752-766. <u>https://doi.org/10.1111/cdev.12007</u>
- Degotardi et al. (2023). *Early Childhood Education and Care Pay and Conditions Research: Final Report*. Education Directorate, Australian Capital Territory and Macquarie University. Under embargo.
- Degotardi, S. (2010). High-quality interactions with infants: Relationships with early childhood practitioners' interpretations and qualification levels in play and routine contexts. *International Journal of Early Years Education, 18*(1), 27-41. https://doi.org/10.1080/09669761003661253
- Degotardi, S., Han, F., & Torr, J. (2018). Infants' experience with 'near and clear' educator talk: individual variation and its relationship to indicators of quality. *International Journal of Early Years Education*, 26(3), 278-294. https://doi.org/10.1080/09669760.2018.1479632

- Degotardi, S., Torr, J., & Han, F. (2018). Infant educators' use of pedagogical questioning: Relationships with the context of interaction and educators' qualifications. *Early Education and Development, 29*(8), 1004-1018. <u>https://doi.org/10.1080/10409289.2018.1499000</u>
- Degotardi, S., Torr, J., & Nguyen, N. (2016). Infant-toddler educators' language support practices during snacktime. *Australasian Journal of Early Childhood Education*, 41(1), 52-62.
- Education Services Australia. (2021). Shaping our future: A ten-year strategy to ensure a sustainable, high-quality children's education and care workforce 2022–2031. <u>https://www.acecqa.gov.au/sites/default/files/2021-</u> <u>10/ShapingOurFutureChildrensEducationandCareNationalWorkforceStrategy-</u> September2021.pdf
- Ehrlich, S.B., Gwynne, J.A., & Allensworth, E.M. (2018). Pre-kindergarten attendance matters: Early chronic absence patterns and relationships to learning outcomes. *Early Childhood Research Quarterly, 44*, 136-151. doi.org/10.1016/j.ecresq.2018.02.012
- Felfe, C., & Lalive, R. (2018). Does early child care effect children's development? *Journal of Public Economics*, 159,33 – 53. https://doi.org/10.1016/j.jpubeco.2018.01.014
- Felfe, C., & Zierow, L. (2018). From dawn till dusk: Implications of full-day care for children's development. *Labour Economics*, 55(259-281). https://doi.org/10.1016/j.labeco.2018.10.006
- Front Project (2019). Upskilling in early childhood education: Opportunities for the current workforce. Future Tracks, Victoria.
- Garvis, S., Lemon, N., Pendergast, D., & Yim, B. (2013). A content analysis of early childhood teachers' theoretical and practical experiences with infants and toddlers in Australian teacher education programs. *Australian Journal of Teacher Education, 38*(9), 25-36. https://doi.org/10.14221/ajte.2013v38n9.5
- Garvis, S., & Manning, M. (2015). Do master early childhood teacher education programs provide adequate coverage of infants and toddlers?: A review of content. *Australian Journal of Teacher Education*, 40(8), 164-175. https://doi.org/10.14221/ajte.2015v40n8.10
- Hadley, F., Andrews, R., Waniganayake, M., Hay, I., Jones, C., & Liang, M. (submitted 25th Jan, 2024). Leadership capacity development in the Australian early childhood sector. Re-energising through mentoring. *Professional Development in Education*.
- Han, F., & Degotardi, S. (2021). Infant educators' reported conceptions of, and approaches to, infant language development: How do they relate to educator qualification Level? *Early Childhood Education Journal, 49*(2), 259-271. <u>https://doi.org/10.1007/s10643-020-01070-4</u>
- Harrison, L., Redman, T., Brown, J., Lavina, L., Davis, B., Degotardi, S., Fordham, L., Hadley,
 F., Jones, C., Waniganayake, M., & Wong, S. (2023). Unpacking and unpicking the
 challenge of 600 hours of preschool attendance. *Australasian Journal of Early Childhood*, <u>https://doi.org/10.1177/18369391231219829</u>

- Harrison, L. J., Wong, S., Degotardi, S., Waniganayake, M., Hadley. F., Davis, B., Jones, C., Fordham, L., Reade, S., Redman, T., Sadow, L., & Brown, J. (2022). *Early childhood education (ECE) participation of children from low socio-economic status backgrounds – A research report.* Final Report for the NSW Department of Education. https://researchers.mq.edu.au/en/publications/early-childhood-education-eceparticipation-of-children-from-low-
- Hooper, A., & Hallam, R. (2017). Exploring the relationship between global quality and group engagement in toddler child care classrooms. *Journal of Research in Childhood Education*, 31(2), 215-226. <u>https://doi.org/10.1080/02568543.2016.1273287</u>
- Horm, D. M., Jeon, S., Clavijo, M. V., & Acton, M. (2022). Kindergarten through Grade 3 outcomes associated with participation in high-quality early care and education: A RCT follow-up study. *Education Sciences*, *12*(12), 908. https://doi.org/10.3390/educsci12120908
- Hu, J., Degotardi, S., Torr, J., & Han, F. (2019). Reasoning as a pedagogical strategy in infantaddressed talk in early childhood education centres: Relationships with educators' qualifications and communicative function. *Early Education and Development, 30*(7), 872-886. <u>https://doi.org/10.1080/10409289.2019.1607449</u>
- Hu, J., Torr, J., Degotardi, S., & Han, F. (2019). Educators' use of commanding language to direct infants' behaviour: Relationship to educators' qualifications and implications for language learning opportunities. *Early Years*, 39(2), 190-204. https://doi.org/10.1080/09575146.2017.1368008
- Infurna, C.J., & Montes, G., (2020). Two years vs. one: The relationship between dosage of programming and kindergarten readiness. *International Electronic Journal of Elementary Education*, 13,(2), 255-261.
- Kuehnle, D., & Oberfichtner, M. (2020). Does starting universal childcare earlier influence children's skill development? *Demography* 57, 61–98. doi.org/10.1007/s13524-019-00836-9)
- Lamb, C. S. (2020). Constructing early childhood services as culturally credible traumarecovery environments: Participatory barriers and enablers for refugee families. *European Early Childhood Education Research Journal, 28*(1), 129–148, https://doi.org/10.1080/1350293X.2020.1707368
- Li, W., Farkas, G., Duncan, G., Burchinal, M. R., & Vandell, D. (2013). Timing of high quality child care and cognitive, language, and preacademic development. *Developmental Psychology*, *49*(8), 1440-1451. <u>https://doi.org/10.1037/a0030613</u>
- Manning, M., Wong, G. T., Fleming, C. M., & Garvis, S. (2019). Is teacher qualification associated with the quality of the early childhood education and care environment? A meta-analytic review. *Review of Educational Research*, 89(3), 370-415. <u>https://doi.org/10.3102/0034654319837540</u>
- McDonald, P., Thorpe, K. and Irvine, S. (2018). Low pay but still we stay: Retention in early childhood education and care. *Journal of Industrial Relations*, *60*(5), pp.647–668. <u>https://doi.org/10.1177/0022185618800351.</u>

Melhuish, E., & Gardner, J. (2020). Study of Early Education and Development (SEED). Impact study on early education use and child outcomes up to age five years: Research report.
 Department for Education, United Kingdom.
 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attach

ment data/file/1030051/SEED 2020 Report.pdf

- Tobin, J. (2020). Addressing the needs of immigrants and refugee families in contemporary ECEC settings: Findings and implications from the Children Crossing Boarders Study. *European Early Childhood Education Research Journal, 28*(1), 10-20.
- Vandell, D., Belsky, J., Burchinal, M., Steinberg, L., & Vandergrift, N. (2010). Do effects of early child care extend to age 15 years? Results from the NICHD study of child care and youth development. *Child development*, *81*(3), 737-756. <u>https://doi.org/10.1111/j.1467-8624.2010.01431.x</u>
- Waniganayake, M., Cheeseman, S., Fenech, M., Hadley, F., & Shepherd, W. (2023).
 Leadership. Contexts and complexities in early childhood education. (3rd edition).
 Melbourne, Oxford University Press.
- Wong, S. (2023). A case study of clinical supervision to support early childhood leaders in times of natural disasters: 'It's not a designer handbag'. *Australasian Journal of Early Childhood*. <u>https://doi.org/10.1177/18369391231217266</u>
- Wong, S., Bull, R., Cumming, T., & McFarland, L. (2024). Supporting leaders in early childhood education settings: An evaluation of a clinical supervision program for centre directors. *Cogent Education*, *11*(1), 2309749. <u>https://doi/org/10.1080/2331186X.2024.2309749</u>
- Wong, S. Fordham, L., Davies, B., & Tran, D. (2023). Supporting regional and remote children's participation in high quality early years services. *Australasian Journal of Early Childhood, 48*(3), 217-233. <u>https://doi.org/10.1177/18369391231173178</u>
- Yazejian, N., Bryant, D. M., Hans, S., Horm, D., St Clair, L., File, N., & Burchinal, M. (2017).
 Child and parenting outcomes after 1 year of Educare. *Child Development*, 84, 2112-2130. https://doi.org/10.1111/cdev.12688
- Zheng, Z., Degotardi, S., Sweller, N., & Djonov, E. (2023). Effects of multilingualism on Australian infants' language environments in early childhood education centers. *Infant Behavior and Development, 70*, 101799. <u>https://doi.org/https://doi.org/10.1016/j.infbeh.2022.101799</u>