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Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi Wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank, and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).

The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.

We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.

We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff, and students we are privileged to work and learn every day with Indigenous colleagues and partners.

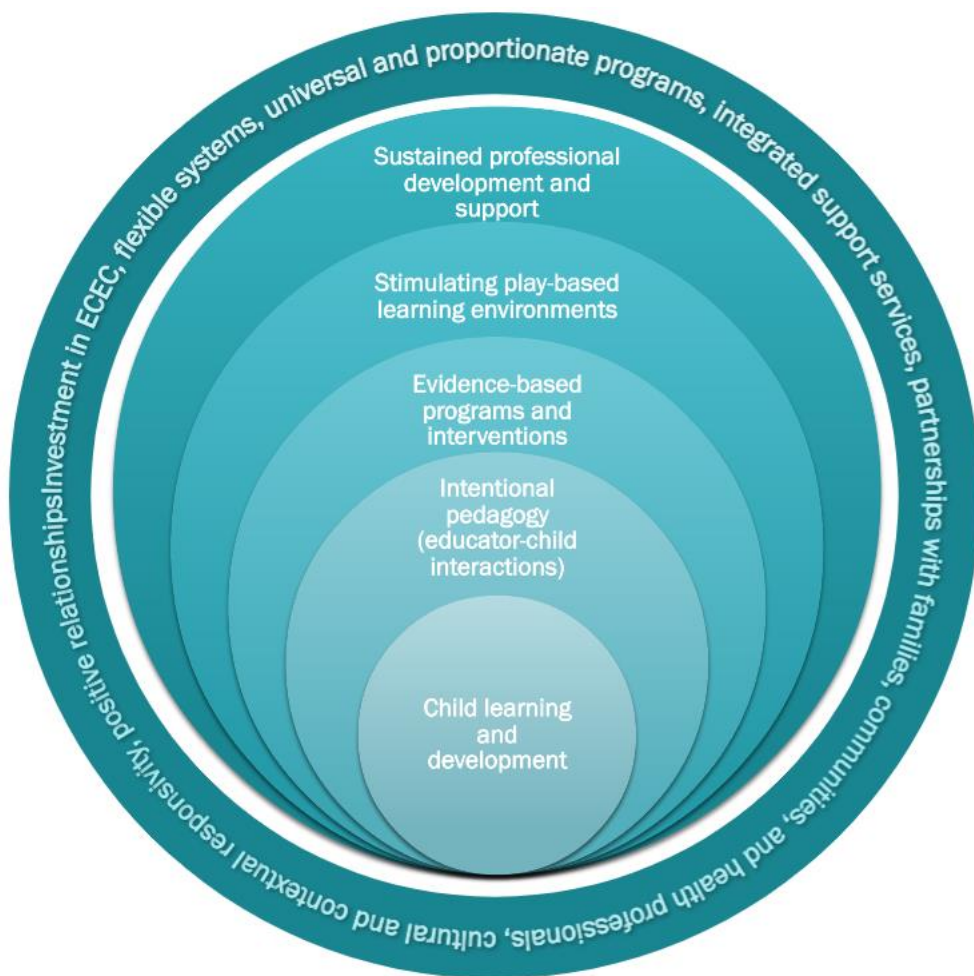
Introduction

In this submission, we contend that two years of quality early childhood education prior to formal schooling (i.e., two years of preschool) boosts the learning and development of all children, especially those experiencing disadvantage. We begin by putting forward our vision for three-year-old preschool in South Australia based on the common features of high-quality, innovative preschool programs we have worked with. After this, we provide some background information on the REEaCh (Research in Effective Education in Early Childhood) Centre and outline the broader context for our vision, using our project, *Building a Bridge into Preschool in Remote Northern Territory Communities*, to illustrate key issues. We go on to discuss the benefits of two years in preschool, describing our Educational and Developmental Gains in Early Childhood (EDGE) study of the state-wide roll-out of three-year-old kindergarten in Victoria. We then argue that a high-quality three-year old preschool program must have strengths in: (a) pedagogy and educator-child interactions, (b) play-based learning programs, (c) professional development support for educators and (d) learning environments. (We use the term, “educator” inclusively, to refer to employees in Early Childhood Education and Care [ECEC] with varying levels of qualifications.) In order to demonstrate the value of these four aspects of quality in ECEC, we report the outcomes of two REEaCh projects: *Every Toddler Talking* and *Victorian Advancing Early Learning*.

Our Vision for Three-year-old Preschool in South Australia

In our vision, the three-year old preschool system is flexible, universal and proportionate to need, so that programs look different in each South Australian community. They are developed through partnerships with families, communities and local services; they are culturally responsive, inclusive and encourage both access and participation for all children. Data from the local community (e.g., from the Australian Early Development Census) drives their priorities.

Figure 1. The REEaCh Centre’s vision for three-year old preschool in South Australia.



We envision a three-year-old preschool system in South Australia that supports children’s learning and development in the context of warm, responsive relationships. The intentional pedagogy of educators within this system emphasises frequent, rich interactions, instructive learning environments and ‘sustained shared thinking’ to extend children’s learning. High-quality programs reflect the practices and principles within the *Early Years Learning Framework for Australia*, with a focus on intentional teaching strategies that are supported

by evidence. Learning and teaching is carried out in a stimulating, collaborative play-based environment that takes into account the interests of children, their families and their communities.

The South Australian three-year-old preschool system we envision has strong pedagogical leadership that underpins continuous improvement and supports staff professional learning, identity, and critical reflection. Educator-child interactions and developmentally appropriate learning experiences in the system are enhanced through sustained professional support. The professional learning of educators focuses on both content and pedagogical knowledge, and educational leaders act as pedagogical coaches who help maintain improvements.

The REEaCh (Research in Effective Education in Early Childhood) Centre

The REEaCh Centre in the Melbourne Graduate School of Education at the University of Melbourne was established in 2019 through the generous support of the Leaper Foundation. Our purpose is to make a sustained impact on the lives of young Australians by advancing the quality of early learning experiences for all children. We have three priorities of research and engagement in ECEC: program quality, the equitable participation of all children, and educational leadership. Our research is multi-disciplinary and occurs in partnership with early childhood stakeholders to build capacity and provide professional learning around two ECEC research programs:

1. Teacher effectiveness, with a focus on teacher or educator-child interactions and assessment for learning practices as valuable ways to maximise young children's learning and development outcomes, and address disparities in development; and
2. Children's learning outcomes, demonstrating the mechanisms (e.g., sufficient quality and intensity) by which programs impact children's learning and development.

Context and Terminology

“The process and practice of educating young children in the early years is a specialist area derived from research into early learning, development, health and wellbeing”.
Emeritus Professor Collette Tayler, (*Page & Tayler, 2016*)

The evidence is clear that high-quality, play-based learning experiences provided through preschool programs for all children three to five years of age benefit cognitive, language and social development in the short- and long-term. This is the positive impact of the universal provision of two years of preschool on the whole population.

The gains are even greater for children from disadvantaged circumstances (Lee et al., 2021). More hours (intensity) of high-quality programs increases the benefits for the most vulnerable children. ECEC programs, services and policies are only equitable when all children and families receive them at a scale and intensity that is proportionate to their individual levels of need and vulnerability.

Flexible systems (such as those documented in European Union and OECD reports) provide minimum hours of universal provision for three- and four-year-olds, with the capacity for additional hours based on children’s needs, a process often referred to as *Proportional Universalism*. An ECEC system built on principles of Proportional Universalism can provide high-quality preschool programs for all, as well as allowing for more intense programs for priority groups of children. This system is the best way to close the gaps in development and learning that emerge during the preschool years among Australian children.

High-quality universal programs have the potential to improve outcomes for all children, across the whole socio-economic spectrum, including those with developmental vulnerabilities. It is important to note that families experiencing barriers to accessing preschool are often more likely to attend a universal service, particularly if it is culturally appropriate (Cascio, 2023). Targeted provision of preschool programs has already proved successful for highly vulnerable young children and families (Jordan & Kennedy, 2019). Longitudinal data from the High Scope/Perry Preschool program and the Abecedarian program demonstrate significant developmental advantages from childhood into adulthood through participation in intensive, long-term, and integrated education and home-learning programs in early childhood.

Quality is central to any vision of the benefits of preschool programs, but characterising what high-quality pedagogy and practice looks like has a long and sometimes chequered history. Quality has customarily been characterized by two domains, *structural* and *process* (Dowsett et al., 2008; Mashburn et al., 2008; Vandell & Wolfe, 2000). Structural quality includes features such as the learning environment, educator qualifications, and child–educator ratios. Also included in structural quality are supports for professional development, learning frameworks to guide educational programming and practice, and support for families to provide home learning opportunities. In contrast, process quality encompasses children’s experiences within preschool programs, with a focus on pedagogy and effective teaching strategies, child–educator interactions and learning programs. Process quality also includes social-emotional support and the fostering of children’s well-being. A third domain of quality, *system*, has been introduced and defined as consisting of factors such as funding, governance and regulatory standards (McClellan et al., 2022).

Process quality can be characterised as the key driver impacting children’s development (Edwards, 2021; Pianta et al., 2016; Torii et al., 2017), whereas system and structural quality are essential to support process quality. Specifically, pedagogy and educator-child interactions, have the greatest impact on overall preschool program quality and importantly on children’s outcomes. There are minimum thresholds of quality, particularly in intentional teaching and responsive interactions, necessary within educational programs before an impact on children’s learning can be expected.

Efforts to improve process quality have a greater impact on outcomes than work focused on structural features in isolation. (Please refer to Case Study 1, Building a Bridge into Preschool in Remote Northern Territory Communities, below for a discussion of how we used structural supports to help develop a program high in process quality within Aboriginal communities.) Staff ratios, class size, and staff qualifications are important for structural quality. However, structural quality alone is not sufficient for the provision of high-quality programs. The links between staff qualifications and high-quality pedagogy are best described in the Starting Strong report (Organisation for Economic Cooperation and Development, 2017) “... it is not only qualifications that affect [child] outcomes; it is the ability of staff members to create a better pedagogic environment that makes a real difference.” p.23.

Case study 1: Building a Bridge into Preschool in Remote Northern Territory Communities

ARC Linkage Project, in partnership with the Northern Territory Department of Education.

High-quality early learning programs that incorporate and prioritise the cultural, linguistic and pedagogical knowledges and perspectives of families and community members are crucial for equitable learning and development outcomes as children transition to preschool and school (e.g., Fuller et al., 2021). The goal of this study was to establish an ECEC learning bridge, supported at one end by the strength of local cultural knowledge and practices, and at the other by proven learning techniques from ECEC research and practice (REEaCh 2021a, 2021b). This case study serves as a good example of how, with sufficient structural supports programs high in process quality can be developed to meet the needs of all children.

The study was conducted with Aboriginal children, families and staff at two *Families as First Teachers* (FaFT) playgroups in remote Northern Territory communities. FaFT is a voluntary early learning and family support program for Aboriginal families in remote communities, co-delivered by a Family Liaison Officer (a local Aboriginal person with early childhood experience) and a Family Educator (an early childhood teacher). The study explored whether a culturally adapted 3a approach (Page et al., 2019; Sparling & Meunier, 2019) could support young Aboriginal children's language, learning and cultural knowledges and skills prior to preschool. In the study, FaFT staff provided parents with coaching in 3a strategies in their first language/s. Contributions from a core *Indigenous Early Childhood Parenting Reference Group* and from each community helped ensure that local culture, identity, and language remained at the centre of the program.

Findings show that children's language and early learning outcomes were associated with program intensity. Higher exposure to Conversational Reading and Learning Games predicted stronger language and developmental outcomes for children. To have the greatest impact on children's outcomes, it was important that the FaFT session was structured so as to increase child and family engagement over time. Daily records supported staff and family members to make sure that every child attending FaFT was engaging in 3a strategies each day. The authentic representation of local culture and language was also an essential component of the program. The culture and languages of children's communities needed to be embedded into the learning content underpinning key evidence-based strategies. In addition, building the capacity of staff and families was critical to the program's success and sustainability. Coaching at FaFT was an effective way to build parents' confidence in the use of strategies, and to show family members how they were supporting children's learning when they were engaging in 3a strategies together.

The outcomes of this study have important implications for three-year-old preschool in South Australia. With respect to pedagogy, maintaining the learning intent of evidence-based strategies that underpinned cultural adaptations was crucial. The provision of coaching and monitoring of parents' mastery of 3a strategies also supported the fidelity of implementation. Overall, Case Study 1 illustrates the potential gains to South Australian communities of a preschool program comprising evidence-based strategies that are implemented as intended while aligning with cultural priorities and tailored to meet the needs of diverse groups.

Benefits of two years of preschool

In this section, we argue that South Australian children will benefit greatly from a high-quality universal three-year-old preschool program. There are strong reasons to expect that providing two years of quality education prior to formal schooling will boost the learning and development of all South Australian children and especially those experiencing disadvantage. Two years of preschool are better than one in promoting later school achievement for children experiencing disadvantage and vulnerability (Pascoe & Brennan, 2018). In addition to reaching stronger developmental outcomes in the school years, children who have attended two years of preschool are less likely to be absent in their first year of formal schooling than classmates who have only attended one year (Ansari & Purtell, 2018).

Universal pre-school programs that have been implemented successfully outside South Australia are worthy of consideration. For example, during 2010, in Ontario, Canada, a universal pre-kindergarten program was offered to four- and five-year-old children in the two years prior to formal schooling. The research on the impact of the Ontario program clearly demonstrates children attending scored higher on academic, social-emotional and behavioural outcomes in primary school (Pelletier & Corter, 2019). Now, Ontario's Full-Day Kindergarten program is being used as a model for other jurisdictions, both nationally and internationally, and was referenced as part of the rationale for the Victorian government's three-year-old universal preschool reform. (For a discussion of our research into this reform, please refer to Case Study 2, *The Educational and Developmental Gains in Early Childhood [EDGE] Study*, below.)

There are also clear economic advantages in providing universal access to funded three-year-old preschool. A recent Australian cost-benefit analysis by The Front Project (2019) indicated that for every dollar spent on three-year-old preschool now, the return is two dollars over a child's lifetime; effectively doubling the investment of the Australian community. It is more cost-effective and beneficial to invest in ECEC than in remedial interventions at a later stage. The long-term gains made after two years attending high-quality preschool programs will not only flow through to individuals but also to the overall prosperity and productivity (Torii et al., 2017) of South Australia.

Case study 2. The Educational and Developmental Gains in Early Childhood

(EDGE) Study

A five-year evaluation of Victoria's implementation of funded universal three-year-old preschool conducted by The University of Melbourne in partnership with the Front Project and with support from the Victorian Department of Education and Training, funded by the Paul Ramsay Foundation and the Ian Potter Foundation.

In recognition of the far-reaching benefits of high-quality ECEC, the Victorian State Government is rolling out funded universal preschool to all three- and four-year-old children. Currently, little is known about the specific impacts of three-year-old preschool on children's outcomes in an Australian context and how to achieve an equitable and impactful system. The purpose of the EDGE Study is to seize this unique opportunity to collect rigorous comparison data from children, their families, and the preschool programs, in order to fill this evidence gap. The project's focus is on measuring the impact of providing preschool for two full years prior to school on children's learning and development.

The EDGE study will generate real-time insights that will be shared with departments of education and participating early childhood providers. We expect the results to inform policy and practice decisions in ECEC nationally. In addition, the EDGE study will address the effectiveness of implementing universal three-year-old preschool across Victoria and provide opportunities to improve and revise implementation at each stage. Through in-depth, qualitative case study work with a subgroup of participating services, centre leaders, educators with teaching qualifications, children and families, the project will help us to highlight key issues for children and generate practical information for the ECEC sector on the programs, practices and learning experiences involved in implementing universal three-year-old preschool.

Quality

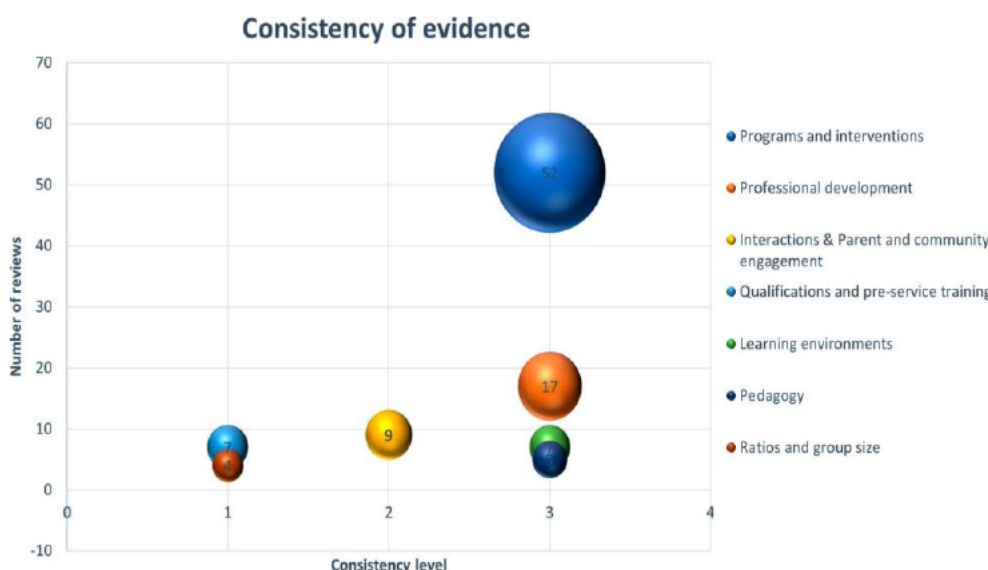
In order to achieve the best outcomes for young learners in South Australia, a universal three-year-old preschool program needs to be high in process quality, featuring strong learning programs and a pedagogy that focuses on educator-child interactions. It must also have key structural components in place, namely, sustained professional development support for educators and safe, stable and stimulating play-based learning environments for children. In this section, we examine these ideas within the framework of a REEaCh scoping review that identified the key features of high-quality ECEC (Eadie et al., 2022), and report on two case studies which exemplify some of the key features of ECEC quality. After discussing our scoping review, we present Case Study 3: Every Toddler Talking and, at the end of this section on quality, we explore Case Study 4: Victorian Advancing Early Learning.

The aim of our scoping review was to map the extent and consistency of the research literature in each domain of quality so that we could identify knowledge gaps and inform

future research (Eadie et al., 2022). We examined ECEC quality within three domains: (a) the process, (b) structure and (c) system domains. Figure 2 shows that according to a large body of research reviewed, learning programs and interventions (the process domain) are consistently important to overall ECEC quality and related child outcomes. A fine-grained analysis of this category revealed that it often included other process variables as subthemes, suggesting that, in keeping with the outcomes of Case Studies 1, 3 and 4, effective ECEC programs/interventions rely on high-quality pedagogy and educator-child interactions. The few studies that examined the positive impact of quality in either educator-child interactions alone or pedagogy alone had results of a moderate and high consistency, respectively.

Figure 2 also shows that there is consistent evidence for the importance of two structural variables: (a) learning environments and (b) professional development and support. It seems likely that while process-quality variables such as the programs and interventions carried out within preschools affect child outcomes directly, structure-quality variables provide important supports for improving process quality, thereby impacting on child outcomes more indirectly (Burchinal, 2018). For example, in Case Study 3, set out below, professional development, collaborations with health professionals and coaching support for ECEC educators led to improved instructional quality.

Figure 2. Matrix of number and consistency of studies in sub-domains.



Case Study 3. Every Toddler Talking

A research evaluation in partnership with the Victorian Department of Education and Training.

Language learning is shaped through the social contexts of children's earliest experiences at home and in ECEC settings with responsive caregivers. Facilitating high-quality interactions between ECEC educators and children affords opportunities to foster language-rich exchanges and promote strong language skills. The present study investigated the impact of a language-specific professional learning program on the quality of educator-child interactions.

Educator practice was compared across 38 ECEC services. (Half participated in Learning Language and Loving It™ and the other half served as a comparison group.) After the intervention, the instructional quality of services in which educators had participated in the professional learning program was significantly higher than that of services in which the educators had not. In addition, the instructional quality within ECEC rooms in which more than one educator had participated in the program was higher than that in rooms in which a single educator had participated. Interestingly though, educator qualifications per se were not associated with higher instructional quality.

Study results indicate that strengthening the discipline-specific knowledge of educators in the context of individual coaching of teaching strategies led to an increase in the quality of educator-child interactions. Findings suggest that quality-improvement programs need to engage with ECEC services regularly and over sustained periods to ensure that resultant improvements in educator-child interactions are large enough to enhance children's outcomes.

The facilitation of Learning Language and Loving It™ by both a speech pathologist and an educational leader in each location was perceived by participants, service leadership and management to be a crucial aspect of Every Toddler Talking. The paired professionals (educational leaders and speech pathologists) brought different but complementary skills and knowledge to the program, and they worked together to deliver training relevant to local community contexts. In some instances, educational leaders and speech pathologists varied in their initial expectations of Every Toddler Talking, and these differences were navigated throughout the course of the intervention. Based on participants' reflections, there were three key features of shared facilitation: (a) the value of a common language when discussing children's communication, (b) the learning opportunities that arose for paired professionals, and (c) the need for educational leaders and speech pathologists to be aware of each other's professional knowledge, strengths and limitations.

In summary, implementing the professional development program, Learning Language and Loving It™ for ECEC educators improved quality in educator-child interactions. It is noteworthy that these advances were even greater when educators worked as collaborative teams. The leadership of an educator who worked alongside a speech pathologist was a key feature of the initiative. Overall, Case Study 3, shows that enhancing process quality in ECEC through multi-disciplinary professional training and support improves the quality of interactions occurring in preschool programs.

Process

Careful attention must be given to process quality when considering ECEC in South Australia. Process quality can be measured through observations of children's experiences and educator-child interactions (Hanno et al., 2021; Pianta et al., 2008), and in many places, including Australia, there is an urgent need to improve the quality of educator-child interactions. Improvements in instructional support in ECEC can be achieved by developing educators' interaction skills through evidence-based teaching strategies and learning programs (Pianta et al., 2016. Refer to Case Studies 1, 3 and 4 for examples of successful interventions based on these principles.)

High-quality pedagogy is characterised by intentional teaching that includes scaffolded learning environments and sustained shared interactions within play-based programs. Indeed, in reviews of ECEC pedagogy, interactional quality has consistently been identified as an important factor in child learning (Eadie et al., 2022; Hanno et al., 2021; McClean et al., 2022). High-quality interactions lead to positive child outcomes with respect to self-regulation, social-emotional skills, school-readiness, and phonological awareness. These positive effects are significantly greater for vulnerable children. Such findings are in line with international research indicating that the relational and interactional quality of educational practices is crucial to promoting language, social, and literacy skills (Burchinal et al., 2016), as well as socio-emotional learning (Mondi et al., 2021) and critical thinking (O'Reilly et al., 2022).

Structure

Learning environments refer to the diverse contexts, locations, and cultures in which children learn. High-quality learning environments are safe, clean, and include a variety of age-appropriate materials in indoor and outdoor spaces that stimulate learning through play (Eadie et al., 2022). Further, high-quality learning environments weave local cultures and identities into learning experiences, reflecting the lives, history, knowledges, and perspectives of families and local communities. For First Nations children, learning environments need to be culturally appropriate and responsive safe spaces, allowing for the development of trust and respect. Learning environments should also include spaces that allow for family and community engagement.

Implementing high-quality preschool programs that integrate intentional teaching within play-based, developmentally appropriate learning experiences requires sustained professional support. Professional development learning programs need to be collaborative, practice-based, include coaching, have multiple learning components, and allow time for implementation and reflection (Eadie et al., 2022). Such programs enhance staff satisfaction, staff motivation and engagement, and reduce potential staff turnover. Importantly, as Case Study 3 (above) and Case Study 4 (below) show, implementing professional learning programs for the preschool workforce can improve quality in educator-child interactions and this improvement can be sustained through the role of the educational leader as a pedagogical coach.

Case Study 4. Victorian Advancing Early Learning

A professional learning intervention in partnership with the Victorian Department of Education and Training

Throughout this submission, we have argued that advancing the quality, frequency and intensity of educator-child interactions has flow-on effects for maximising young children's learning and development, addressing disparities in child outcomes in the years prior to school. Case Study 4, which was built on the findings of the E4Kids Study (Tayler et al., 2016) further supports these claims (Pilsworth et al., 2017; REEaCh, 2019a, 2019b). In this study, we developed, piloted, and tested the impact of professional learning in evidence-based teaching strategies. Specifically, we explored the effects of training and coaching ECEC leaders and educators in the Abecedarian Approach Australia (3a) by examining changes in educator-child interactions over time.

Based on a participatory action research approach, VAEL educators worked with children from birth to five years of age. Throughout the course of the professional learning intervention, we tracked the quality of their interactions. We measured the levels of emotional, organisational and instructional support in classrooms using the Toddler and Pre-K CLASS (Classroom Assessment Scoring System) Tools. Initially, we conducted a pilot study in two ECEC services. We then implemented the adapted professional learning model for two consecutive years in a new service (main study). We continued working with the long day care service from the pilot study for a further year to track ongoing impact. VAEL results showed that the training and coaching lifted the quality of all educators' interactions with children across all rooms. The professional learning program led to increased levels of emotional and behavioural support and engaged support for learning provided by teachers to children from six months to three years of age. In addition, the program enhanced the emotional support, classroom organisation and instructional support for children three to five years of age (REEaCh, 2019a, 2019b). These positive outcomes were strongest in services with leadership support and stable staffing.

Taken together, VAEL findings indicate that joint, targeted, ongoing evidence-informed professional learning with coaching from trained educational leaders to support implementation, improves the quality of educator-child interactions. In addition, when we explored changes in children's concepts and cognition across the intervention, we uncovered improvements that went beyond expected developmental changes. Furthermore, families reported that participation in VAEL led to benefits for children that played out in their interactions within the home. In the pilot service which engaged in the study for two years, the levels of quality interactions continued to increase across the duration of the study in all rooms. Thus, children continued to experience consistent, high-quality interactions with educators as they moved across rooms, both before and during three- and four-year-old kindergarten.

Conclusion

In this submission, we have contended that making two years of high-quality preschool available across South Australia could lead to significant gains in early learning and development as well as helping to narrow the gap between different groups of children. We

argued that there are at least four essential features of high-quality ECEC. First, educators must have a well-developed pedagogy emphasising their interactions with children. Second, learning programs should be built on strong evidence. Third, educators require support and Case Studies 1, 3 and 4 serve as powerful illustrations of how appropriate professional learning, combined with ongoing coaching from educational leaders, enhances ECEC for all children. Fourth, ECEC environments need to be safe, stimulating and collaborative, and play based. Importantly, educator-child interactions are central not just to a strong pedagogy among educators, but to all four aspects of ECEC quality. In Case Study 2 (the Victorian-based EDGE study), we will explore such interactions and evaluate the impact of universal funded three-year-old preschool on all children, with a focus on the potential role of ECEC in breaking cycles of disadvantage.

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