08 May 2023

Submission to the Royal Commission into Early Childhood Education and Care

Introduction

We, the undersigned, are a collective of committed and highly experienced educators and therapists who, jointly, have many years of implementing Cognitive Education and Mediated Learning programs for young children and providing Cognitive Education and Mediated Learning training for staff and caregivers.

We are presenting this submission because not only do we strongly believe in the power and effectiveness of Cognitive education and Mediated Learning approaches for young children, but beyond belief, there is evidence across many countries and cultures that such investment in the early years can help combat disadvantage and positively affect children's development years beyond their lives in pre-school. South Australia continues to have more developmentally vulnerable children under five years of age than the national average, across all five domains. 56.4% of children under 5 years in South Australia live in disadvantaged socio-economic circumstances (Submission from Child Development Council to the Royal Commission into Early Childhood Education and Care). Developmental vulnerability and economic disadvantage can significantly impact longer-term academic, social and emotional outcomes for children. South Australia has in the past, shown leadership and innovation in response to challenges which will continue with this Royal Commission into Early Childhood Education and Care.

We submit that Cognitive Education programs and Mediated Learning approaches be included in the support for children and families in the early years and that they are delivered by staff with appropriate training. The Mediated Learning approach and training not only benefits the cognition of the child but also their educators and trained family members (Kozulin, 2015). We respectfully suggest and urge that they be included as part of the Early Years Strategy that is currently being developed for South Australia.

Preamble – Why are Cognitive Education and Mediated Learning important?

- Research across many contexts, diverse groups and cultures has shown consistent evidence that the brain is more malleable and develops most rapidly during infancy and the early years than at any other time in life. At least 85% of brain development occurs in the first five years of life.
- "There is evidence that oral language and literacy and executive functioning are important areas for learning in the two years before school" (Royal Commission Interim report, p61). These areas are considered critical from birth.
- Dr Holly Baines's work, through the "Wellcome Leap" initiative (Royal Commission Interim report, p132) also underscores the critical role that developing executive functioning skills in the early years of a child's life plays, and significantly impacts on, longer term cognitive development, health and wellbeing across the lifespan.

It is imperative that appropriate support and learning opportunities are implemented during this critical, neurologically malleable learning period and that children are given the opportunity to lay down the foundational thinking and learning processes required for their lifespan, ensuring they are lifelong successful learners. This submission addresses a small but vital component of the Royal Commission; i.e., that young children (including babies) begin to develop the neural pathways and executive functions required for successful academic, social and emotional learning through the provision of appropriate experiences and materials delivered by staff and caregivers who have had specific training to do so.

Cognitive Education Collective – Jennifer Cummings, Nikki Maguire, Helen Meyer, Sarah Stevens, Mary Williams

To enhance and enrich these essential cognitive skills, two best-practice, evidence-based approaches for young children are presented. These are:

- 1. Teaching parents, caregivers and care providers the strategies and techniques of Mediated Learning and
- 2. Implementing structured Cognitive Education programs for children aged 3-5 years.

In addition to developing and enhancing cognitive skills, these approaches help young children develop higher levels of Intrinsic Motivation, another predictor of longer-term academic achievement.

Proposals and Terms of Reference.

Terms of Reference 1. The extent to which South Australian families are supported in the first 1000 days of a child's life, focussed on opportunities to further leverage early childhood education and care to enable equitable and improved outcomes for South Australian children.

Proposal 1 That parents and caregivers have the opportunity to learn and develop the skill/technique of Mediated Learning during the first 1000 days of young children's lives.

1. Mediated Learning - Brief Overview

There are myriad ways that families of young children need, and can benefit from, support in the first 1000 days of a child's life including the emotional, social and financial domains. Babies and young children require a combination of positive circumstances and opportunities that will enable them to develop the thinking and learning skills required for successful schooling and development of social and emotional skills. Circumstances and opportunities will vary from child to child and some may be far from ideal and can place the child at a disadvantage. Typical factors which are well known, can be social isolation, economic hardship, lack of parenting skills and difficulties with communication with their child. Without appropriate intervention, children's development can be at risk.

"Mediated Learning" is powerful in helping the adult to establish and foster the environment required for optimal learning, despite the circumstances the child may come from. Mediated Learning is a strategy that parents and caregivers can learn and put to excellent use both in the home and in day care facilities. Mediated Learning also has the end goal of ensuring the child learns strategies to independently self-mediate.

2. Mediated Learning

i) What is it and why is it important?

Mediated learning is about rich, responsive interactions between a child and a significant other. It involves reciprocity, responsiveness, respect, connection and meaning. In older children, it encourages them to develop and become aware of their own thinking skills, through the use of questions that exercise reflective thinking in the child. They actively develop cognitive and metacognitive skills.

In very young children and babies, mediated learning resembles the intricate dance of reciprocity and responsiveness between the infant and their caregiver and leads to both a sense of safety and control over their universe, and the longer-term development of intrinsic motivation. These are some of the essential attributes that underpin successful development of cognitive, social and emotional skills across the lifespan.

Mediational skills can be taught to parents and caregivers in the home, although wider family norms and social/cultural contexts can influence efficacy. These skills can be taught to caregivers in early years care centres.

Please see Appendix 1 for reference and research articles about the efficacy of the use of Mediated Learning as a tool.

ii) How might it be implemented?

See Appendix 2 for some initial details. Further details of training and implementation can be shared as a follow up to this submission if required.

Terms of Reference 2. How can universal quality preschool programs for three- and four-year-olds be delivered in South Australia, including addressing considerations of accessibility, affordability, quality and how to achieve universality for both age cohorts? Consideration of universal three-year old preschool should be undertaken with a view to achieving this commencing in 2026.

Proposal 2. That all early years' pre-school program providers for children aged 3 to 5 years (383 government and 250 non-government) implement formal and structured Cognitive Education programs for their children.

1. Early Years Cognitive Education - an Overview

Formal and structured Cognitive Education programs can contribute significantly to the quality pre-school programs offered to children aged 3-5 years. The primary goal of cognitive education is to help children acquire effective tools of systematic logical thinking, self-regulation, social interaction, and learning. Based on the science of neuroplasticity and the pedagogy of mediated learning, cognitive education programs are a powerful tool for enhancing and enriching the cognitive abilities of young children.

One such internationally researched and evidence based Cognitive Education program is "Bright Start" and has been developed for children aged 3-6 years. Bright Start was first developed in the 1990s by Professor Carl Haywood in the USA, translated into several languages and recently updated and expanded (2021).

Bright Start Cognitive Education | (coged.net)

The Bright Start Program | Bright Start CCYC (brightstart-ccyc.com)

2. Bright Start

i) What is it and why is it important?

When children are not successful learners, they may lack the cognitive skills needed for social and academic learning. The Bright Start programme was developed to help children become more effective learners by directly targeting the cognitive processes and concepts that underlie foundational learning, social and communication skills.

It teaches young children about metacognition – thinking about their thinking – about how, when and why to apply their newly learned thinking skills.

"It is a structured approach, with strong emphasis on the child's understanding of rules and explanatory concepts. Teachers emphasise the orderliness and predictability of the world, beginning

with the principles of organisation, rule following, rule-making, rule applying and the systematic processes required for orderly perception, analysis, understanding, learning and problem solving" (page 1 Bright Start manual).

The Bright Start program has 8 cognitive units – Self Regulation, Number Concepts, Comparison, Role Taking, Classification, Sequence and Pattern, Letter-Shape Concepts and Transformations. The Cognitive Education programs can be delivered in both play-based and more structured environments that actively encourage the development of curiosity and investigation. They operate in conjunction with the original pre-school curriculum. The program uniquely and intentionally combines the affective process of learning with the cognitive concepts required to be a successful lifelong learner.

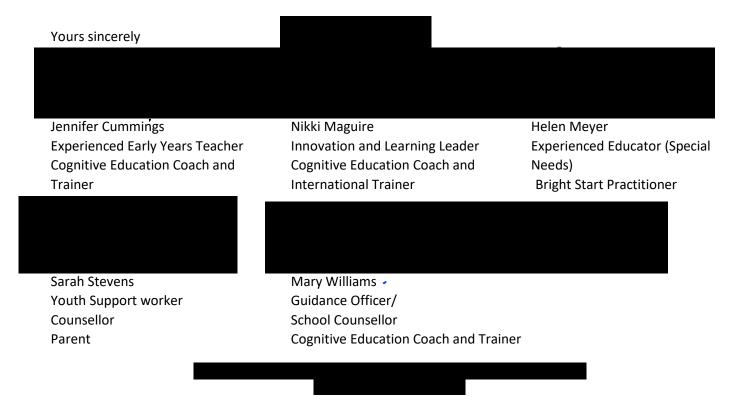
There is extensive evidence about the efficacy of teaching cognitive education programs like Bright Start in the early years. It has been successfully implemented with children who are migrants, children who may have developmental delays and children from disadvantaged backgrounds. While there has been no research about the efficacy of Bright Start with young Indigenous children in Australia, there is ample evidence that it is a program that reaches across culture, gender and economic status. A small sample of research articles is included in Appendix 3.

The program itself is open source; however, the delivery of the program requires intensive and systematic training by endorsed facilitators.

ii) How might it be implemented?

See Appendix 4 for some initial details. Further details of training and implementation can be shared as a follow up to this submission if required.

We welcome you to contact us and would be pleased to support further exploration of these highly recommended EARLY YEARS INTERVENTIONS and to provide you with further information.



We acknowledge the Traditional Custodians of Country throughout Australia. We recognise their continuous relationship and connection to the land, to waterways and to communities. We pay our respect to all Elders, past and present, and extend that respect to all Aboriginal and Torres Strait Islander people.

Appendix 1 Information about Mediated Learning experiences

Mediated Learning - WISDOM Home Schooling

<u>Early cognitive intervention using mediated learning for preschoolers with developmental delay: A randomized controlled trial - Keung - 2022 - British Journal of Educational Psychology - Wiley Online Library</u>

3072-215-007.indd (wesleyan.edu)

Reciprocity between infants and caregivers during the first year of life | SpringerLink

Appendix 2. Mediated Learning Implementation Plan

Following are some ideas about how understanding and using Mediated Learning can be integrated into support provided to families in South Australia.

- Print and podcast material could be made available for publication through the Raising Children Network's "First 1000 days page" website. Contact details for more individual support for developing Mediated Learning skills would be provided.
- 2. Print and podcast material could be included as part of the Australian Childhood Foundation's "Bringing up Great Kids in the first 1000 days" training programs.
- 3. Specific training (4 hours) to be provided for staff in long day care facilities in South Australia (between 45-64% of children aged 1-5 years, in South Australia, attend long day care).
- 4. Staff in Child and Family Health Services (South Australia) provided with training (4 hours) to support parents and care givers to use Mediated Learning with their children. Print and podcast material to be available on their website also.

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Appendix 3. Research articles showing efficacy of the Bright Start Cognitive education program.

<u>Effects of the "Bright Start" program in kindergarten on transfer and academic achievement -</u> ScienceDirect

(PDF) Effects of the Bright Start program in kindergarten on use of mediation and children's cognitive modifiability (researchgate.net)

<u>Developing children's cognitive functions and increasing learning effectiveness: an intervention using the Bright Start cognitive curriculum for young children | Semantic Scholar</u>

Cognitive Early Education | Oxford Research Encyclopedia of Education

The Bright Start Program: Research Perspective | Request PDF (researchgate.net)

Application of IE-Basic Program to Promote Cognitive and Affective Development in Preschoolers: A Chilean Study. Published in: Journal of Cognitive Education and Psychology, 9 (3), 2010. By: Natalia Salas, Cecilia Assael, David Huepe, Teresa Pérez, Fernando González, Alejandra Morales, Rita Arévalo, Chetty Espinoza and Grimaldina Araya

<u>The Impact of Cognitive Education Training on Teachers' Cognitive Performance</u> Kozulin, A (2015) Journal of Cognitive Education and Psychology Vol 14, Issue 2.

Appendix 4. Bright Start Implementation Plan

- Training requirements to implement "Bright Start" vary between 2-3 days (depending on prior knowledge and experience). This includes zoom/teams meeting (or face to face training if possible), viewing podcasts, readings. Training in Bright Start incorporates training in Mediated Learning. There are service providers throughout Australia (and internationally) who would be available to provide training.
- 2. A team of people who would become Cognitive education supervisors and mentors could be initially trained in the Bright Start program. These people, after a period of experience would then be available to support other staff when the programs are to be implemented more universally.
- 3. Staff training could begin initially in early years facilities in locations identified as economically disadvantaged, or in facilities were there are a large number of developmentally vulnerable children.
- 4. Staff training would then extend to staff in other in pre-school facilities, who would be implementing "Bright Start" Cognitive Education programs.
- 5. Universities could incorporate a Cognitive Education subject in any pre-service training that is provided for early years staff.