Te Tāhuhu o te Mātauranga
Ministry of Education

2025 Early Childhood Education Funding Review Ministerial Advisory Group

Overview of the key benefits of early childhood education

Introduction

Government subsidisation of early childhood education (ECE) aims to support child development outcomes, as quality ECE can provide tamariki with a strong foundation for long-term learning and life outcomes. Equally, ECE subsidies enable parents and caregivers to participate in the labour market and support their families with the cost of living.

This report provides a high-level summary of key evidence on the child development and labour market benefits of ECE, highlighting the importance of creating a fit-for-purpose ECE funding system.

Child outcome benefits of ECE

As ECE is often a child's first exposure to the education system, it is important that it provides a strong foundation for future life and learning. As the Government's Child and Youth Strategy states, getting the early years right can influence life-long trajectories, and break negative intergenerational cycles (Ministry of Social Development, 2024). The first few years of life are critically important for children's outcomes in education and adulthood, as the skills that children develop in early childhood strongly influence later life. While parents and caregivers have the most significant role in these early years, ECE also has an important part to play.

Participation in ECE has been shown to improve children's long-term learning, social, economic, and wellbeing outcomes (Schmutz, 2024; Van Huizen & Plantenga, 2018; Melhuish et al., 2015). It achieves this by supporting socio-emotional, cognitive, and language development. However, evidence suggests that these benefits are not accrued evenly across all children. The impact of ECE is influenced by several factors, including service quality, a child's socio-economic background, a child's age, and intensity of participation. Further information about these factors is provided in the following sections.

Quality of ECE provision

Research shows that the potential benefits of ECE can only be realised if the ECE is of high quality (Van Huizen & Plantenga, 2018). In fact, participation in low quality ECE can be detrimental to a child's development, especially for children from low-income families (Melhuish et al., 2015).

Indicators of quality within ECE settings broadly fit into two key categories: structural quality and process quality. Structural quality refers to indicators that can be easily measured or counted, for example:

- Staff qualifications
- Adult-to-child ratios
- Room size
- Physical space per child
- Number of staff engaging in professional learning and development (PLD) (OECD, 2019).

Process quality refers to indicators that are less tangible and harder to measure, such as:

- Interactions between adults and children
- Organisation of routines
- Approaches to supporting social-emotional skills

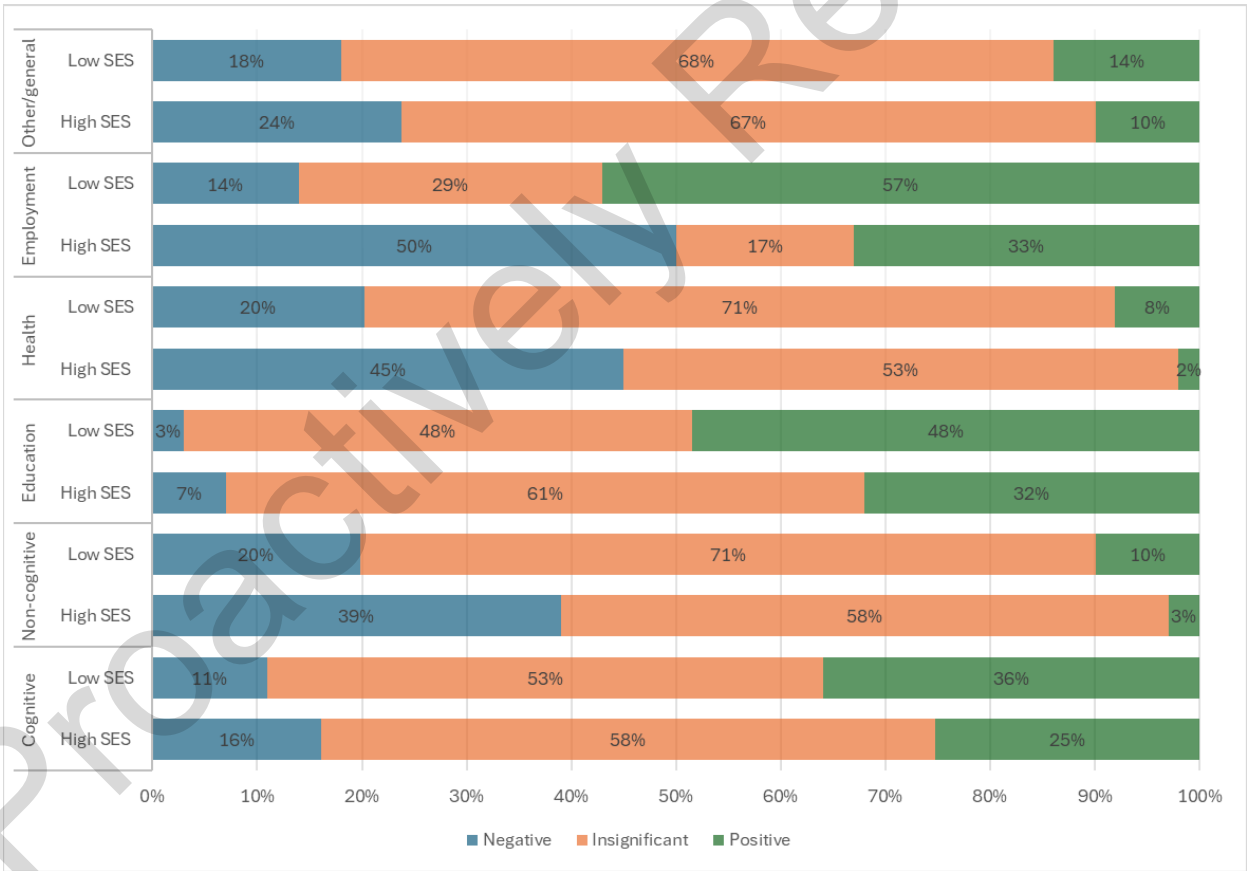
- Service connection to the community
- General design of teaching and learning (OECD, 2019).

Many countries, including New Zealand, typically focus on influencing structural measures of quality as they are easier to monitor, regulate, and financially incentivise. Certificated teacher funding bands is an example of this in New Zealand's current ECE funding system. However, both structural and process quality are important to ensuring children receive the greatest benefit from ECE.

Socio-economic background

Generally, children from low-socioeconomic communities benefit more from participation in high quality ECE than children from advantaged backgrounds (Schmutz, 2024). This is because ECE can provide an effective substitute to the lower-quality home learning environments commonly associated with socio-economic deprivation. Figure 1 summarises Schmutz 2024's findings on the impact of ECE across six outcome domains, differentiated by socio-economic status.

Figure 1: Impact of ECE across outcome domains differentiated by socio-economic status (adapted from Schmutz 2024)



Child age

Research into child outcomes and ECE is often differentiated by age, reflecting both the differing developmental needs of children and the age-based variations in ECE provision common in other countries.

For 3-year-olds, participating in high quality ECE is universally beneficial, with the greatest benefits accruing to children from low socio-economic backgrounds (Melhuish et al, 2015). However, evidence about the provision of ECE for under 3-year-olds is less conclusive. Melhuish et al. (2015) states that "while the research on pre-school education (3+ years) is fairly consistent, the research evidence on the effects of childcare (0-3 years) upon development has been equivocal with some studies finding negative effects, some no effects and some positive effects." The article is clear to make the distinction between the type of ECE provision for 3-year-olds and over (preschool) and for under 3s (childcare). As provision of ECE in New Zealand is integrated, this finding may not be applicable in our context.

Additionally, some research expresses concern about the health implications of very young children attending ECE. Compared to infants in parental care, infants attending centre-based ECE are approximately two times more at risk of ear and chest infections and two and a half times more at risk of gastro illness (Duncan et al. 2019). Further, for 2-year-olds, attending more than 30 hours a week of ECE can be linked to an increased risk of hospitalisation due to complications with an ear, chest, or gastro infection.

Intensity of ECE participation

Participation intensity should also be considered when assessing the beneficial effects of ECE. Although it is often discussed, there is not a strong consensus in the research about participation intensity. Some evidence concludes that higher levels of participation can lead to higher beneficial effects for children (Melhuish et al, 2015). Others express concerns about full-day ECE and attachment, stating that long hours of parental separation can be emotionally distressing, especially for very young children (Melhuish et al, 2015).

Participation intensity is extremely important for language immersion ECE services, such as puna reo services. Representatives from immersion ECE services often advocate for higher participation intensity, as increased exposure improves language acquisition. The relationship between bilingualism in indigenous languages and educational outcomes has been widely studied internationally. May et al. (2004) summarises extensive literature on the cognitive benefits of bilingualism. They conclude that research since the 1960s has broadly demonstrated advantages to being bilingual in a variety of cognitive and metacognitive tasks. Further, Māori medium education pathways have been shown to deliver better outcomes for Māori learners compared to English medium pathways. Māori learners in Māori medium education are more likely to leave school with a Level 3 or University Entrance qualification than Māori learners in English medium education (Ministry of Education, 2022).

Measuring Child Outcomes

Although New Zealand does not currently measure the effects of ECE on child outcomes, there are measures in comparable jurisdictions such as Australia.

The Australian Early Development Census (AEDC) measures the development of Australian children in their first year of school. Data is collected by teachers who respond to questions that measure development indicators in 5 key domains (AEDC, 2024). Children are allocated a score against the domains to determine whether they are developmentally on track, at-risk or vulnerable.

The domains measured are:

- Physical health and wellbeing

- Social competence
- Emotional maturity
- Language and cognitive skills
- Communication skills and general knowledge

In 2023, the Australian Education Research Organisation (AERO) and researchers from the University of Queensland (UQ) examined how quality ECE provision links to the learning and development outcomes of Australian children. Generally, ECE services' quality predicted children's vulnerability on each of the development domains (AERO, 2024)[1]. This was most significant in the emotional maturity, social competence, and communication skills and general knowledge domains. Additional analysis was undertaken for populations often associated with poor development outcomes (e.g. low socio-economic populations). Across these populations, the link between developmental vulnerability and ECE service quality was consistent with the overall findings (AERO, 2024).

Labour Market Participation benefits of ECE

Despite the child outcome benefits outlined above, parental motivation for enrolling children in ECE is predominantly driven by the need to work. According to the Growing Up in New Zealand (GUiNZ) longitudinal study, by two years of age, 56% of participating children were routinely cared for by someone other than their parent (Morton et al., 2014). Most parents (87%) stated the reason for this was the mother's professional or academic commitments. More recently, consultation undertaken by the Ministry for Regulation found that 75% of parents choose to enrol their children in ECE to participate in paid employment (Ministry for Regulation, 2024).

Parental engagement in paid work is associated with a range of benefits, including, improving outcomes for women, stimulating the economy, and reducing material hardship and child poverty. Further details about these benefits are outlined in the sections below.

Improving outcomes for women

Childcare responsibilities have a disproportionate impact on women's labour market participation. In the GUiNZ study, 53% of mothers were engaged in paid employment when their child reached two years old, compared to 94% of their partners (Morton et al., 2014). A more recent survey of the division of paid and unpaid labour in New Zealand shows that women are more than four times as likely as men to report not being in full-time employment due to childcare responsibilities (Deloitte, 2021).

Although these trends can be partly attributed to social and cultural norms, they can also be impacted by access to affordable ECE. GUiNZ has reported that 18% of mothers not in paid employment when their child reached two years of age felt ECE was not worthwhile due to its cost (Morton et al., 2014). Additionally, Statistics New Zealand's 2017 childcare survey found that 19% of parents working or wanting to work identified cost as the main barrier to accessing childcare (Statistics New Zealand, 2017).

The Motu Economic and Public Policy Research Trust have estimated that the total value of wages lost by mothers with a child under three due to lack of childcare access is $116 million

[1] Service quality was assessed using Australia's National Quality Standard (NQS)

per year (Benison & Sin, 2023). They also emphasise that low socio-economic status, Māori, Pacific, and disabled women are the groups most impacted by this wage loss.

Stimulating economic activity

The New Zealand economy is influenced by the size of its workforce, accordingly, an increase in labour market participation can be a significant driver of economic growth.

A 2021 report by Westpac and Deloitte estimated that New Zealand's economy would be $1.5 billion larger every year if childcare and home duties were split more evenly between men and women (Deloitte, 2021). Another report estimated that if women's participation in the workforce in every country matched the pace of the fastest improving nation in their region, global GDP could grow by $12 trillion over the next decade (McKinsey Global Institute, 2015).

Reducing material hardship and child poverty

Parental employment can significantly impact a family's likelihood of experiencing material hardship and poverty. Although working households can still experience material hardship, parental employment is a way to lift the financial wellbeing of families. The Ministry of Social Development's Child Poverty Report outlines that approximately 40 percent of beneficiary households experience material hardship, compared to 9 percent of working households (Ministry of Social Development, 2024). Intensity of paid work also has a significant influence. For example, sole parent households are particularly at risk of material hardship, as their potential working hours are limited.

As outlined above, the cost of childcare can be a barrier for some parents participating in the workforce. Research has shown that access to childcare can be influenced by socio-economic status, and that high-income, educated, New Zealand European women are more likely to have children participating in ECE (Benison & Sin, 2023). Although families facing material hardship can benefit greatly from ECE, they are not as likely to access it as higher socio-economic families.

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