Learners get a good start in education

Why does it matter that learners get a good start in education?

Good quality early childhood education (ECE) has benefits for children that continue into their time at school and beyond. The early years are a very important time for children's brain development, providing the foundations for positive life outcomes, including lifelong learning and wellbeing.

A child's attendance at quality ECE has been linked with a range of positive thinking, learning, social and emotional outcomes. ^{i ii} Quality ECE contributes to effective lifelong learning, and can lead to improved cognitive outcomes, including in mathematics and reading and writing skills. ⁱⁱⁱ

Other capabilities which may be supported and developed by participating in quality ECE include capabilities related to managing yourself (e.g. self-control, concentrating and continuing to try even when a task is difficult) and relating to and getting on with others (e.g. working together and being able to talk with others about your needs as well as their needs). All of these capabilities help children and young people to have a good experience in education, to get on well with other people and to have positive outcomes in their lives.

There is national and international evidence that good quality ECE has a long-lasting positive effect on young people's achievement and wellbeing in education. High quality ECE includes a focus on the kind and quality of staff-child interactions. In countries that have specific quality requirements for ECE (including qualified teachers and low numbers of children per teacher) there is a stronger link between children taking part in ECE and later positive learning and achievement outcomes. vi

Starting ECE earlier rather than later (e.g. by age 2 or 3) has more positive benefits on outcomes than starting later and attending for a short time only^{vii}. Current New Zealand evidence shows that achievement gains for children from attending ECE for more than 3 years are not higher than for children attending for 1 or 2 years^{viii}. Long periods of attending ECE for long hours from under 2 years old has been linked to some negative behaviours, but these effects have been linked to the quality of the particular ECE service.

There is also New Zealand evidence from the Competent Children study that the quality of ECE makes a big difference for children and young people, over time in their lives. Quality ECE supports wellbeing, learning and relating well to others, as well as contributing to the achievement of the child later in their education pathway.

Regularly taking part in high quality ECE makes the biggest positive impact for children from less well-resourced backgrounds, and for children with ongoing needs for support with their learning and development (this includes children with sensory challenges and with learning, social and emotional needs). Quality ECE doesn't change everything for every child, but it can help children overcome the challenges they face and set them up for a good start at school.^x

Home factors also matter. International and New Zealand research identifies a range of factors that has been linked to young children's ongoing wellbeing and achievement, including maternal education level, family situation and parental understanding about the things that support their child's learning and development. The combination of this range of challenges has been identified as having profound negative impacts on children in the early years of their life. Socio-economic factors and the level of deprivation along with being in a single-parent household have a significant impact on the ability of parents to do the things that make the most difference for their children in the early years^{xi}.

The research evidence about ECE outcomes identifies that the positive benefits on thinking, learning and achievement last until age 14 or 15^{xii}. There is less strong evidence about the long-term effects of ECE on learning dispositions and socio-emotional outcomes.

Quality in ECE

When people talk about quality in ECE they usually mean structural and process quality, with both aspects of quality being strongly linked to each other.

Structural quality includes the number of adults to the number of children, the group sizes, staff qualifications, training and education, staff wages and working conditions, and staff stability.

Process quality refers to relationships and interactions directly experienced by children and families. Evidence shows children do best when educators are positive, warm, and understanding in their interactions with children, and provide lots of opportunities for 'shared sustained thinking'.xiii For very young children in particular, educators need to be predictable and dependable, so that they support the development of secure attachments and trusting relationships with one or a small number of key adults.xiv

Process quality has the most significant impact on children's educational outcomes. However, structural conditions have a direct effect on process quality, because they influence the ability of educators and teachers to respond to children in the most positive ways.**

Research in ECE distinguishes between quality requirements for learning and development of children under two years (infants and toddlers) and requirements for young children aged over two years. Language, culture and identity also matter and impact on the understanding of what counts as quality.

The Education Review Office (ERO) has found that quality teaching and effective delivery of the curriculum in ECE (process quality) need:

- high quality leadership:
- a way of working that includes regularly thinking about and finding out more about how your teaching is making a difference for every child; and
- the chance for all teachers to take part in regular and ongoing professional learning and development that includes all of the staff working with children, to improve teaching and learning for every child.xvi

International research into the quality of ECE also identifies the need for and importance of regular, high quality professional learning and development.xvii

Increased participation in ECE relies on the ECE being high quality to have the greatest impact. Structural features and regulatory requirements are often used to define what counts as quality in ECE at the system level. There is evidence that identifies New Zealand ECE as having high quality structural features.xviii

At the same time the process features of teaching and learning and relationships and interactions in ECE are at the heart of quality ECE, as experienced by infants, toddlers and young children and their parents. Both sets of features together are needed to make sure that every child participating in ECE is having the best possible quality of ECE experience.

Some ECE services support parents in their parenting. Where offered, this can provide another benefit of quality ECE. Mitchell, Royal Tangaere et al., (2006) also report that parent

participation in the education programme and in adult education courses, and leadership for adult learning, are associated with greater gains for parenting in parent/whānau-led centres in New Zealand.xix

The diversity of the Early Learning sector

About 200,000 children aged 0-5 are enrolled in ECE in New Zealand. The early learning sector is diverse in make-up. Children may be educated and cared for by groups of parents and whānau, by qualified teachers, or by educators in the home. Provision may be in English, in te reo Māori or in other languages, responding to the needs of children and their families and communities.

The main licensed early learning service types are^{xx}:

- education and care (63% of children in ECE, around 125,400 children)
- kindergarten (16% of children in ECE, around 31,000 children)
- home-based networks (10% of children in ECE, around 20,500 children)
- kōhanga reo (4% of children in ECE, around 8,900 children)
- playcentre (6% of children in ECE, around 12,600 children)

In addition children can be enrolled at Te Aho o te kura Pounamu I the Correspondence School. There has been an increase in the number of children enrolled in Puna Reo (early learning in te reo Māori not affiliated to TKR National Trust).

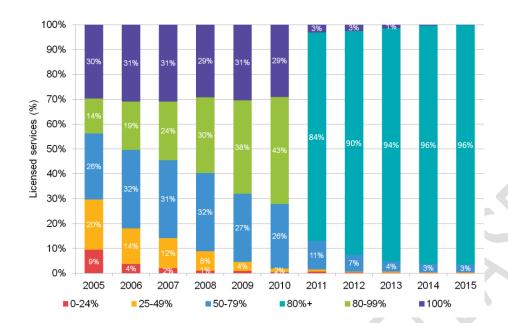
There are:

- 493 early learning settings (including mostly kohanga reo and 24 puna reo);
- 115 stand-alone Māori-medium kura and wharekura;
- 164 settings providing education in and through Māori within a larger English-medium school;
- 26,652 Māori students in Māori-medium; and
- Just under 12% of all Māori students in Māori-medium early learning, primary and secondary.

Ownership of ECE services ranges from charitable and community trusts to Health Boards and public education institutions in the public domain, and privately owned companies, partnerships and incorporated societies in the private sector. The data and information needed to determine whether or not children attending for-profit ECE versus not-for-profit ECE receive high quality learning opportunities and experiences is not available.

Services with higher percentages of registered teaching staff as a proportion of the total funded child hours in an ECE service receive higher funding rates. This is to incentivise services to employ more qualified teachers so they meet the qualified teacher component of quality service provision. The proportion of teacher-led, centre-based services in the 80%+funding band has been consistently increasing since 2005. In 2015, 96.4% of teacher-led, centre-based services were in the 80%+ funding band compared with 43.8% in 2005.

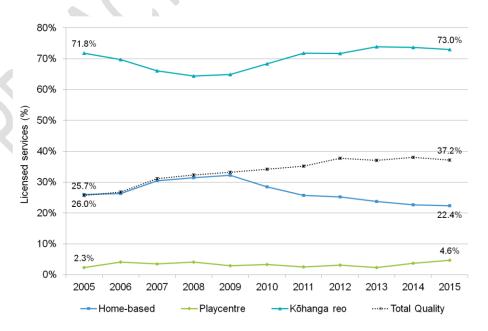




Play centres, kōhanga reo and home-based services have different funding criteria and can receive either a quality or standard funding band, with a higher hourly rate being paid for the quality band. Services on the quality funding band meet additional requirements in relation to qualifications, adult-to-child ratios and the size of the service.

The proportion of services in the quality funding band has increased from 25.7% in 2005 to 37.2% in 2015. The total has been fairly steady between 2012 and 2015, as an increase in the numbers of both play centres and kōhanga reo in the quality band has offset a decline in the number of home-based services in this category.

Proportion of home-based services, play centres and kōhanga reo in the quality funding band, 2005-2015



This data shows an overall increase of 11.5% in the number of services receiving quality funding, over the ten years from 2005. The data also shows that during the period home-based ECE has had a reduction in numbers of services receiving this funding, indicating that there are fewer qualified teachers employed overall. More recently home-based care provision is the fastest-growing type of ECE provision in New Zealand.

How are we doing?

More children in early learning

Concerted efforts by communities and government has led to significant growth in the ECE participation rate, which is now at 97%. Participation has lifted, particularly for Māori, to 95%, for Pacific communities to 92%, and for children from lower socio-economic communities^{xxii} to 94%. XXIII While participation in ECE has grown significantly for disadvantaged children, they are attending for fewer years, and for less time during those years, than children from higher socio-economic communities. XXIV

Participation in ECE increases with age. Around two out of three 2-year olds are participating in ECE, compared to over 90% of 3- and 4-year olds. Since 2000, the greatest increases in participation rates have been for children aged 1 and 2.

Partnership between whānau Māori and educators in early learning services enhances what it means to succeed as Māori. As ERO points out, partnership is particularly important for Māori children because of the central role whānau play in building children's sense of identity. ERO identifies that only genuine partnership with whānau Māori can meet the intention of the curriculum, Te Whāriki.

Anecdotal evidence suggests that children with disabilities and learning support needs are either not attending ECE, attending ECE for fewer hours than other children, or attending only for the time that extra or dedicated support is available for them. Further work is needed to understand the extent of the barriers that children with disabilities and learning support needs face when accessing ECE.

We know the benefits of ECE depend on the quality of provision and regular attendance, and the relationships between the adults in the service, the children and their parents and whānau. New Zealand has the features needed to support quality ECE, including: low ratios; high public investment; and high proportions of qualified teachers. ERO reports, however, show wide variation in the quality of curriculum implementation and in the quality of teaching and relationships, and therefore learning opportunities for children, across the sector. We also know that expecting every child to learn and develop with the guidance and support of their parents, whānau, teachers and other professionals is key to the learning and development of every child.

Te Whāriki is a bicultural curriculum that emphasises the holistic learning and development of the whole child. The strands and principles of the curriculum provide a framework within which the whole child is expected to be valued and respected, in the wider context of their identity, language and culture, and their family, whānau and community. Oral language or signing matters (whether this is signing, speaking in English or speaking in a first language other than English). Oral language or signing is the basis for all learning and social interactions, and includes the capabilities required to speak, listen, understand and respond. Rich language experiences from birth, including early turn-taking with older speakers and, exposure to wideranging meaningful and interesting vocabulary are directly linked to both language development, relationships with others and learning to read and to write in the early years of school.

In 2017 ERO reported that 19% of ECE centres reviewed were effective in supporting oral language, 50% had some focus and 31% had limited or no focus. Te Whāriki emphasises the importance of Communication Mana Reo, as one of the strands of the curriculum, and identifies a learning outcome that intends that children develop, over time and with encouragement, an increasing ability to understand oral language (or signing) and to use it for a variety of purposes. ERO's findings suggest that there is a problem related to the quality of support for children's oral language learning and development in many ECE services.

Some children who start school in New Zealand are able to use 6,000 words, while others start school able to use only 3,000 words. The Welcome to School: A study of disadvantage on entry to school data clearly identifies the level of language acquisition deprivation in this population: It is important to note that "oral language" includes signing and speaking in first languages other than English. Every child needs the opportunity to learn to communicate right from birth in the ways that meet their needs. For children with communication difficulties, including children on the autism spectrum, suitable alternatives to oral communication need to be put in place as soon as possible.

More than 26% of new entrants in the Manaiakalani Schools were operating at the level that could be expected for the bottom 1% of New Zealand children (see below) on entry to school¹. Children came from linguistically diverse backgrounds but more than 85% of parents reported English was their child's 'best' language.

Data captured by a Speech Language Therapist on the core communication skills of 5 yearold children starting school in Tamaki ***i

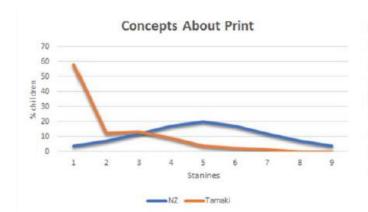
80 70 60 50 80 70 60 50 NZ NZ NZ September-10.50/* NZ CELF Core Language Centile

Core Language Centiles

'WTS' represents the sample of Manaiakalani students.

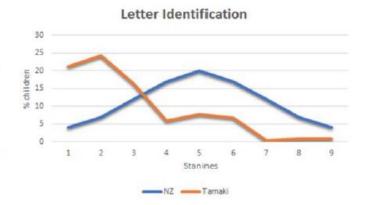
¹ Note that the evidence from Manaiakalani is published, and is likely to represent the pattern in other schools, but data for comparative schools is not available.

These data correlated with how the children functioned in the classroom as well as their School Entry Assessment Data collected one month after enrolment.



Concepts About Print checks whether children know how a book works, e.g. which way up it should be, which way you turn the pages and which way the text goes. This reflects the exposure our young learners have had to text or books prior to entering school.

Letter Identification checks just what you would expect it to, and shows interestingly, more alphabet knowledge than book knowledge. We believe this shows that our local ECE's are paying some limited attention to alphabet item knowledge along with colours and counting, but it's obvious that this is not systematic or universal.



ECE providers who respond well to children's diversity and their culture promote better educational outcomes.**xvii Children do much better when education reflects and draws on their identity, language and culture. Teachers can strengthen learning by making connections between learning in ECE and learning in children's lives in ways that value and enhance their cultural identity.

In *Priorities for Children's Learning in Early Childhood Services*^{xxviii}, ERO investigated how effective each service's curriculum was, in supporting Māori children to achieve success as Māori. ERO's sample included all service types, except for kōhanga reo. ERO found that 14% of services were very effective in their focus on achieving success for Māori. In these services teachers worked with whānau to design and implement their curriculum. In the most effective services, teachers encouraged whānau to share their expertise, experiences, aspirations and whakapapa. Local iwi and kaumatua were also consulted so that teachers could improve their knowledge and practices relating to local history and kaupapa Māori. In the most effective services, the curriculum, environment and assessment practices reflected Māori values and celebrated Māori children as competent learners, celebrating their language and culture.

In 28% of services in the sample, understanding of how to provide a curriculum that was effective for Māori was limited. A further 26% of services were not providing a curriculum that supported Māori children achieving success as Māori.

In *Partnership with Whānau Māori in Early Childhood Services*, ^{xxix} ERO evaluated the extent to which services:

- understood and valued the identity, language and culture of Māori children and their whānau
- managers and educators built positive relationships with the whānau of Māori children
- each service worked in partnership with the whānau of Māori children.

In this evaluation ERO found that ECE educators were limited in their ability to work in genuine partnership with Māori and often agreed with the view that "all children should be treated the same." ERO also found that many services did not do enough to value and acknowledge children's language, culture and identity. This is a strong focus in the ECE curriculum document Te Whāriki, 2017. ERO's sample included all service types except for kōhanga reo.

ERO reports suggest wide variation in teaching quality and delivery of the curriculum.**xx ERO has found that highly effective services with high quality teaching are also well led and managed. In these services leaders have high expectations for teaching and learning for all infants, toddlers and young children, and promote a collaborative and collegial culture.

The range of teaching quality in ECE provision is identified as a major issue over time in a number of ERO reports. A report from ERO in 2010^{xxxi} indicated that only 14% of ECE services deliver very effective curriculum for their Māori learners, while only 6% deliver effective curriculum for Pacific learners.

In Priorities for Children's Learning in Early Childhood Services **xxii*, ERO investigated how effective each service's curriculum was in supporting Pacific children's learning. The report found that 6% of services in the sample had very effective practices for Pacific children. Te Whāriki 2017 includes an increased focus on Pacific languages, cultures and identities.

In the most effective services, both leaders and teachers recognised the importance of Pacific children's cultures, languages and identities. These services provided a culturally rich environment, achieved through the employment of Pacific teachers, implementing a culturally appropriate curriculum, supporting children's language development, developing partnerships with parents, families and communities, celebrating cultural events and having appropriate teaching and learning resources, including visual displays. In these services, children showed a strong sense of pride and knowledge about their culture. This was also reflected in their assessment records.

In these highly effective services, warm, trusting and respectful relationships were central to developing children's social competence and wellbeing. Getting to know children and their parents strengthened the relationships between parents and teachers. Some services provided opportunities for parents to contribute their ideas to the curriculum. Finally, an important feature of these very effective services was the practice of robust self-review, reflecting an ongoing intention to improve outcomes for Pacific children.

ERO found that 15 percent of services in the sample had some practices that enabled Pacific children to experience success. In 21% of services the implementation of curriculum had very little or no impact on Pacific children's success. A further 13% had no awareness of how to promote success for Pacific children.

As yet there is not a universal mechanism for identifying and responding to children with disabilities and additional learning support needs in the early learning sector. While specialist

support is available, it is not clear whether children with disabilities and additional learning needs have the same opportunities to learn with and alongside their peers across the sector.

ERO's 2012 report, Inclusion of Children with Special Education Needs in Early Childhood Services**xxiii, identified that of the sample of services they reviewed, 44% of services were very inclusive of children with learning needs, and 49% were mostly inclusive. The main characteristics of very inclusive services were identified as:

- believing that children with learning needs were capable and confident learners
- having and practising very inclusive processes and practices
- accessing and providing additional support as appropriate
- working collaboratively with parents and key professionals from other agencies.

In this study ERO found little evidence of self-review related to the progress of children with disabilities and learning support needs, and regardless of the level of inclusiveness, services faced challenges in supporting children with learning needs. Difficulties with making referrals and accessing funding and support were also identified.

There is a trend of increasing demand for specialist support from early learning intervention, including Learning Support. This includes support from early intervention teachers, speech language therapists and psychologists. The waiting time to access specialist support is variable across the country, depending on local demand and the availability of resources.

The 2017 study *Welcome to school: A study of conditions of disadvantage on entry to school on the Manaiakalani Kāhui Ako^{xxxiv}* indicates that for the 120 children sampled over 12 months in this study, there were high levels of unmet developmental needs, and correspondingly lower than expected rates of referral to Learning Support services.

Early learning with a mathematics focus

Children's early experiences of mathematics form the foundation for their future mathematics learning and success. Research suggests early mathematics capabilities are highly predictive of later academic achievement.**

A range of issues affects the quality of early teaching in mathematics, xxxvi including:

- educators with low levels of mathematical knowledge and a resulting lack of confidence, limiting their provision of teaching and learning opportunities and their ability to respond to children's interests;
- educators seeing mathematics as numeracy only:
- educators missing opportunities for sustained, shared cognitive engagement focussed on early numeracy; and
- educators being unaware of the need to cater for children's differing interests and mathematical abilities, and to provide challenging learning experiences and opportunities for all.

This ERO report does not include sufficient evidence about the size of the problem they describe, and the differences between service types are not disaggregated. It is therefore not

possible to determine whether there is a pattern by service type or in relation to other features of the ECE setting, in the provision of support for learning in mathematics.

Whānau and family partnerships supporting quality ECE

Establishing connections and relationships with parents, whānau and communities provides access to a greater range and depth of resources to support the educational journey, enhancing outcomes for children. Meaningful relationships with family and whānau provide opportunities to deepen and strengthen connections to different contexts where learning happens. In their 2012 report *Partnership with Whānau Māori in Early Childhood Services*, ERO reported that only 10% of services in the sample had built effective and culturally responsive relationships with their whānau.

The Growing Up in New Zealand study asked parents to indicate the different forms of regular communication they had with their child's ECE provider or carer.xxxvii They found that communication occurred through:

- brief face-to-face conversations were very common (92%), for example at pick up or drop off;
- the use of a learning portfolio or child profile book (69%); and
- regular newsletters (58%), emails (39%), telephone calls (43%) and shared notice boards (49%).

More than half of the parents reported being very satisfied (67%) or moderately satisfied with the frequency and mode of communication between themselves and their child's ECE or caregiver. Less than 2% reported being dissatisfied or very dissatisfied.

In the Good Start in Life report parents of young children with disabilities and additional learning needs commented on the impact for them of ECE services whose approach was to make their child and family welcome and genuinely included. They also noted that many parents were not reporting this kind of positive and inclusive response to their young children with disabilities and additional learning needs.

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