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BACKGROUND PAPER 



Systematic review of early childhood and pre-primary education

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**Dr Anna Dabrowski, Yung Nietschke, Syeda Kashfee Ahmed, Dr Michelle Hsien,
Dr Dan Cloney, Dr Tim Friedman**
Australian Council for Educational Research (ACER)

TABLE OF CONTENTS

DEFINITIONS	4
EXECUTIVE SUMMARY	8
Methodology	8
Review findings: What works and why	9
Priorities across all policy types	10
Conclusion and recommendations	10
1. Introduction	11
1.1. Policy typology and links to the UN SDG4 targets	11
1.2. Aims	14
1.3. Report structure	15
2. Methodology	16
2.1. Conceptual framework	17
2.2. Key research questions	18
2.3. Search strategy	18
2.4. Inclusion criteria	22
2.5. Exclusion criteria	23
2.6. Evidence selection and reporting	23
2.7. Analysis approach	28
2.8. Limitations	29
3. Review findings: What works and why	31
3.1. Institutional policies	31
3.2. Interventionist policies and programs	37
3.3. Preventative policies and programs	40
3.4. Compensatory policies and programs	43
4. Geographic trends	46
5. Priorities across all policy types	49
5.1. Wellbeing and safeguarding	49
5.2. Holistic learning and development	49
6. Conclusion and recommendations	51
REFERENCES	54
APPENDICES	63
Appendix 1: Review methodology	63
Appendix 2: Featured interventions	64

List of tables

Table 1. List of sources for the review	9
Table 2. List of sources for the review	20
Table 3. Population, Intervention, Context and Outcomes (PICO)	21
Table 4. Search inclusion criteria	22
Table 5. Data coding categories	24
Table 6. Classification of the identified documents with policy interventions into key themes	29
Table 7. Geo-distribution of the reviewed documents	47

List of figures

Figure 1. Systematic review processes	16
Figure 2. Conceptual Framework	17
Figure 3. PRISMA flow diagram showing the identification and selection of included sources from literature and other sources	27
Figure 4. Process for thematic analysis	28

DEFINITIONS

This review draws on a range of terms used in the education literature to define both the population and interventions of interest. In the context of this study, these key terms are defined as follows:

Terms	Meanings
Access	Access refers to the ability of individuals to obtain educational opportunities and resources without encountering barriers or obstacles that impede their participation or enrolment. It encompasses the availability, affordability, geographic proximity, and inclusivity of educational institutions, programs, and services, as well as the removal of discriminatory practices that may prevent certain groups from accessing education.
Attendance	Attendance is defined as the proportion of days children are actually present in pre-primary programmes during the school calendar period. It captures both regularity and dropout risks. Attendance may be influenced by household circumstances, child health, or quality of provision, and is crucial for understanding sustained engagement in early learning.
Caregiver outcomes	Access to childcare and early education may enable increased maternal labour-force participation, improve work stability, or support adult education enrolment. These downstream effects are recognised where reported, particularly in evaluating social protection-style interventions or publicly funded EC systems.
Comparison groups	In included studies, comparison groups may receive no intervention, a business-as-usual scenario, or an alternative intervention. Studies comparing two forms of early childhood interventions are included as long as outcomes are clearly reported and comparable.
Cost-effectiveness	A secondary but important concern. When reported, costs will be captured and compared relative to educational outcomes, such as cost per additional child enrolled or cost per additional school-ready child. However, it is anticipated this may be inconsistently reported and thus only support limited comparative analysis.
Completion	Defined in pre-primary education as a child having finished the final year of a recognised early childhood programme before transitioning into primary school. While not always formally assessed at this stage, completion may be inferred through graduation rates, readiness assessments, or school records.
Disability	Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.
Early childhood	The early childhood period encompasses several quite distinct phases: from ‘conception to birth’ and from ‘birth to 3 years’, with emphasis on the first 1,000

Terms	Meanings
	days (from conception to 24 months), followed by the ‘preschool and pre-primary years (3 years to 5 or 6 years, or the age of school entry).
Educational settings	Environments where learning occurs. Can be both formal (institutional educational settings, often registered and regulated, including classroom settings and distance education) or non-formal (other settings, including home environments, unregulated care, and community programs). Can include alternative educational pathways.
Engagement	Within an educational context, engagement means students directing their attention and energy towards a particular task or activity. In the classroom, the term ‘engagement’ is often used to refer to the extent of students’ active involvement in a learning task. It does not refer to enrolment or attendance.
Enrolment	Enrolment refers to the process of registering or formally enlisting individuals, typically students, into an educational institution, program, course, or activity.
Ethnicity	Ethnicity refers to the social group to which an individual belongs, often based on shared cultural, linguistic, religious, or ancestral characteristics. Ethnicity can be influenced by factors such as migration, assimilation, and social interactions.
Evidence base	An evidence base is garnered from the best available evidence from systematic research.
Equality	Equality refers to a process whereby individuals are treated with equal respect, dignity, and consideration, regardless of their background, characteristics, or circumstances.
Equity	Equity refers to a process whereby individuals are given what they need to have equal opportunities and access to resources, regardless of their background, characteristics, or circumstances. Equity recognises that people have different needs and may require different levels of support to achieve the same outcomes. Equity is central to the review, and sub-group analyses will consider how interventions affect children differently by gender, socio-economic status, disability, ethnicity, and geographic location. Intervention effectiveness must be interpreted with an equity lens.
Families and caregivers	This term families encompasses parents, caregivers, guardians, and other adults responsible for the care of children and young people. In some settings this may also include supports outside of the family network, such as religious leaders and other community members.
Fragile and conflict-affected states	Fragile and conflict-affected states (FCAS) are countries or regions characterized by significant political instability, violence, armed conflict, or societal unrest, often resulting in the breakdown of governance structures, social cohesion, and public services. These states typically exhibit high levels of insecurity, displacement, human rights violations, and economic vulnerability, which impede their ability to provide basic services, maintain security, and promote sustainable development.



Terms	Meanings
Follow-up period	Follow-up period is not a basis for inclusion or exclusion. Where studies report multiple follow-ups, outcomes most consistent with other studies will be used in meta-analysis; others may be discussed narratively.
ISCED (International Standard Classification of Education)	ISCED (International Standard Classification of Education) level 0, as defined by UNESCO, refers to early childhood education, which is further divided into two sub-levels: ISCED 010 (early childhood educational development, for children aged 0 to 2) and ISCED 020 (pre-primary education, for children aged 3 to the start of ISCED 1, or primary education). These programs are typically school-based or institutionalized for a group of children.
Inclusive education	Inclusive education is an approach to education that aims to ensure all students, regardless of their background, abilities, or differences, are provided with equitable access to quality education and are fully supported to participate and succeed in schooling.
Indigenous communities	Indigenous communities are groups of people who are native to a particular region or territory and have maintained distinct cultural, social, economic, and political traditions that are often rooted in their ancestral lands for generations. Indigenous communities typically have deep connections to their land, language, customs, and traditional knowledge systems, which play integral roles in their identity, spirituality, and way of life. Despite their diversity, indigenous communities worldwide share common experiences of historical marginalization, discrimination, and struggles for recognition of their rights to land, self-determination, and cultural preservation.
Internally displaced people (IDP)	Internally displaced people (IDP) are individuals or groups who have been forced to flee their homes or places of habitual residence due to armed conflict, violence, human rights violations, natural disasters, or other crises, but who have not crossed an international border to seek refuge in another country.
Learning	Learning in this context is primarily interpreted in terms of early developmental progress rather than formal academic achievement. Socio-emotional, language, and early cognitive development are key domains. These outcomes are sometimes measured using tools adapted for young learners, such as observational checklists, teacher assessments, or standardised early learning assessments.
Migrant	A migrant is an individual who moves from one place to another, usually across borders or within a country, with the intention of settling temporarily or permanently in a new location. Migration can occur for various reasons, including economic opportunities, family reunification, education, environmental factors, or seeking asylum from persecution or conflict. Migration can be voluntary, or involuntary.
Minority status	Minority status refers to the condition of being part of a group that is numerically smaller or has less power or influence within a particular society or community compared to the dominant or majority group. This status can be based on various factors such as race, ethnicity, religion, language, gender, sexual orientation, disability, or socio-economic status. Minority groups may face

Terms	Meanings
	systemic discrimination, marginalization, and unequal treatment in access to resources, opportunities, and decision-making processes.
Mother-tongue language	Mother tongue language refers to the first language that a person learns from birth or early childhood, typically within their family or community environment.
Participation	In the context of education, participation refers to the active engagement and involvement of students in classroom activities. Participation is defined as meaningful engagement in activities that are developmentally appropriate and culturally and contextually relevant, allowing children to explore, experiment, and interact with their peers and educators in the settings they attend. Participation is dynamic and is influenced by a variety of factors, such as individual child's interests, abilities, and the quality of interactions and relationships within the early childhood environment.
Professional learning or development	Training for educators to enrich and improve their professional practice.
Retention	Retention refers to the practice of keeping students in the education system for an extended period. In the context of interventions that support out-of-school children, retention is often focused on attendance, rather than advancing students to the next level of their schooling or learning.
Secondary outcomes	Secondary outcomes may also include intermediate variables such as parental knowledge, child health, or nutrition where these are presented as part of intervention theory. For example, some household-level interventions that reduce costs (e.g. cash transfers) may aim to influence parental decision-making and lead to increased ECCE enrolment. These are considered relevant if they form part of the logic model linking intervention to educational participation.
Sense of belonging	Sense of belonging refers to the sense of connectedness, acceptance, and inclusion that children feel within their ECCE environment. It encompasses feelings of being valued, respected, and supported by peers and staff, as well as a sense of ownership and attachment to the ECCE community.
Social and emotional learning (SEL)	Social and emotional learning (SEL) is a process of acquiring social and emotional values, attitudes, competencies, knowledge, and skills that are essential for learning, being effective, well-being, and success in life. Research shows that social emotional learning enhances children's academic success while preventing mental health conditions.
Social exclusion	Social exclusion refers to the process by which individuals or groups are systematically marginalised or prevented from fully participating in various aspects of society, such as economic, political, cultural, or social activities.
Special education	Special education refers to educational programs and services designed to meet the specific needs of students with disabilities or special learning requirements.
Transition	Transition refers to children's movement from early childhood education into formal primary school. Successful transition can include measures of readiness, documented entry into schooling, and evidence that children are adapting to the formal school environment.

EXECUTIVE SUMMARY

Early childhood care and education (ECCE) participation is a critical foundation for lifelong learning, development, and social equity, linked to improved long-term educational, health and socio-economic outcomes. Given the evidence on ECCE participation and human development outcomes, there have been notable increases in international commitments to ensure greater access to quality and inclusive ECCE services. The UN has set an ambitious agenda under Sustainable Development Goal target 4.2 by 2030 to “ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education”. As a result, many countries are now providing at least one year of free pre-primary education. However, despite global advances, it is estimated that 50% of children are still not enrolled in pre-primary education. Disparities in ECCE access and participation are persistent, especially in low-resource and marginalised communities.

This systematic review synthesises global evidence from academic and grey literature published between 2015 and 2025, examining effective policies and interventions aimed at increasing ECCE participation across diverse country contexts, with a focus on equity dimensions such as gender, disability, socio-economic status and geographic location. The multifaceted nature of increasing ECCE participation is highlighted, exploring institutional, interventionist, preventative, and compensatory policies as per the GEM policy typology, while emphasising equity, quality, and contextual factors. These categories reflect the different levels and areas within which policies operate, noting that in practice, approaches to increase ECCE participation often are combined or overlap.

Methodology

The method is guided by a conceptual framework using a social determinants perspective derived from Goldfeld et al.’s (2017) Social Determinant Framework. This recognises that multiple factors influence ECCE participation, including socioeconomic status (SES), parental education and involvement, healthcare, nutrition, and safe and stimulating environments. The framework also recognises the multiple outcomes from ECCE, including increased participation in ECCE (as measured through enrolment, attendance, and completion of the early years), improved developmental outcomes (with particular attention to socio-emotional learning and sense of belonging), and enhanced opportunities for caregivers, especially women (as reflected in employment, income, or education participation). It reflects an ecological view of ECCE access where children’s participation is inextricably linked to their home, community and policy environment.

The following research questions guided the review:

1. What types of interventions are most effective in increasing early childhood participation?
2. What institutional, interventionist, preventative, and compensatory policies are most effective in increasing participation rates in early childhood education programs?
3. What are the differential effects of these policy interventions based on child and household characteristics such as gender, poverty level, disability status, rurality, and linguistic or cultural identity within their contexts?
4. How do contextual factors, such as political commitment, institutional strength, and the presence of complementary services, influence the success of interventions aimed at increasing early childhood participation?
5. What are the long-term impacts of these interventions on educational outcomes at the school level?

A broad search strategy, following the PRISMA 2020 guidelines, captured over 27,164 records, narrowed to 84 key documents selected for extraction and analysis. The analysis grouped studies thematically into coordinated, targeted, equity and inclusion and universal interventions, which enabled efficient subsequent categorisation against policy types in the GEM policy typology.

Review findings: What works and why

The evidence base is largest for institutional policies that aim for universal access to ECCE, as many countries have adopted such strategies to achieve population-wide outcomes. At the same time, such policies often fell short of meeting the needs of specific population groups, risking further inequities if access to universal systems is unevenly distributed. Interventionist policies enhance universal ECCE systems by providing additional, targeted support for children and families within ECCE services, while preventative policies address barriers that may arise before the moment of enrolment. Compensatory policies provide valuable alternatives for children and families unable to access formal ECCE services.

While all effective ECCE systems combine elements of all policy types, the optimal balance between them will depend on the prevalence of the distinctive contextual challenges that each policy type addresses. For each policy type, a distinctive set of policy solutions are also available as evidenced in the literature, which may be implemented individually or in combination to meet identified needs.

Table 1 summarises the findings for each policy type, including the definition of each type as it applies to ECCE; the contextual challenges it addresses; and the suite of possible policy solutions. Each solution identified below is supported by the evidence to some extent, with the strength of evidence varying depending on the frequency with which type has been implemented and quality of research.

Table 1. List of sources for the review

<p style="text-align: center;">INSTITUTIONAL POLICIES</p> <p>Establishment and expansion of universal formal ECCE settings, including funding and regulation.</p> <p>Contextual challenges</p> <ul style="list-style-type: none"> • Universal access (not yet achieved) • Workforce shortages • Maintaining quality at scale <p>Policy solutions</p> <ul style="list-style-type: none"> • Strong, visible commitment to ECCE • Evidence-based duration and dosage • Integrated service systems • Teacher quality • Service quality 	<p style="text-align: center;">INTERVENTIONIST POLICIES</p> <p>Targeted supports for children and families who face specific challenges in reaping the benefits of their participation in ECCE services.</p> <p>Contextual challenges</p> <ul style="list-style-type: none"> • Inclusivity (addressing exclusion) • Absenteeism for target groups <p>Policy solutions</p> <ul style="list-style-type: none"> • Inclusive ECCE programs • Health interventions and school feeding • Targeted service provision
<p style="text-align: center;">PREVENTATIVE POLICIES</p> <p>Support to address economic, cultural or social barriers before they limit ECCE participation.</p> <p>Contextual challenges</p> <ul style="list-style-type: none"> • Economic inequality and access • Cultural and social norms <p>Policy solutions</p> <ul style="list-style-type: none"> • Fee relief and cash transfer programs • Parent engagement in ECCE • ‘Stacked’ household support 	<p style="text-align: center;">COMPENSATORY POLICIES</p> <p>Alternative or informal programs for children who are unable to access other ECCE services.</p> <p>Contextual challenges</p> <ul style="list-style-type: none"> • Long-term exclusion • Temporary disruption <p>Policy solutions</p> <ul style="list-style-type: none"> • Parent education • Non-formal settings

Geographic trends were evident in how these policy solutions were combined across countries and regions. High-income countries have near universal access but continue to wrestle with the quality and equity of access to of ECCE. Middle-income countries focus on scaling access while maintaining quality. Lower-income countries prioritise basic access and often ECCE programs are integrated within more mature health/nutrition programs.

Priorities across all policy types

The evidence also indicated priorities that must be considered across all policy types above:

- *Wellbeing and safeguarding* to ensure that all ECCE services – whether formal or informal – protect children’s safety and wellbeing, including their social-emotional safety.
- *Holistic learning and development* that goes beyond supporting academic outcomes alone.
- *Legal frameworks and rights* that situate ECCE participation within a rights-based discourse.
- *Cohesive governance, financing and implementation*, especially in integrated ECCE service provision where inter-agency cooperation and seamless funding are key success factors.
- *Balanced central and decentralised leadership*, combining a strong, centralised commitment with devolved decision-making to communities in contextually-relevant service delivery.
- *Evidence and data* to monitor progress and impact, including on child outcomes.
- *Equity indicators* to highlight disparities across economic, social and cultural groups.
- *Community co-design and ongoing feedback* to maintain responsiveness to community needs.

Conclusion and recommendations

While investing in ECCE participation yields high returns for societies, achieving equitable access at scale requires sustained commitment and nuanced, multi-pronged policy design. While limitations remain in the evidence base, especially in the lack of causal evidence linking specific interventions to increases in ECCE participation, a range of policy solutions have produced promising results.

The review’s final recommendations encourage all countries to work together to refine how ECCE participation is defined and monitored, including improved identification of gaps across regions. Better monitoring of ECCE systems can help to address the inevitable tensions between increasing participation and maintaining quality at scale, and ensure that responses to these challenges are grounded in a robust evidence base. Most importantly, the safeguarding of children must be deeply embedded in all ECCE policies and programs, so that system expansion does not come at the expense of child safety and wellbeing. Lastly, future research agenda must continue to expand the evidence base on both the short-term and long-term social and economic benefits of ECCE participation, so that investment in ECCE can be informed by clear expectations of the benefits that it can provide.

1. Introduction

The global policy imperative to increase participation in Early Childhood Care and Education (ECCE) is well-established and reflected prominently in international development frameworks such as Sustainable Development Goal (SDG) 4.2, which explicitly targets universal access to quality early childhood development, care, and pre-primary education.

Participation in ECCE is a critical determinant of children’s developmental outcomes and later success. Research consistently shows that children who attend quality preschool programs tend to enter primary school better prepared and achieve stronger educational and social outcomes (UNICEF, 2019). In the long term, ECCE participation and attendance have been linked to significantly improved educational attainment, higher socio-economic status in adulthood, and better health outcomes. Despite the demonstrated benefits, global disparities persist. Children in low-resource settings, rural areas, or marginalised communities often experience markedly lower rates of ECCE participation, thus reinforcing cycles of poverty and inequality. As a result, increasing early childhood participation – especially for disadvantaged groups – has become a major policy focus worldwide.

This report presents a comprehensive analysis of the impact of policy interventions on expanding early childhood and pre-primary education participation and outcomes, drawing on a systematic review of academic literature and grey literature sources. The review addresses both attendance outcomes (enrolment rates, regular attendance, completion of pre-primary programs, transition to school) and child developmental outcomes (cognitive, socio-emotional, health, and educational achievements) resulting from participation in ECCE. It builds on an earlier scoping review of interventions to support early learning in economically developing contexts also undertaken by the Australian Council for Educational Research (ACER) (Jackson et al., 2019), to broaden and deepen the evidence base.

1.1. Policy typology and links to the UN SDG4 targets

ECCE policies can be grouped into four categories to support prioritisation by systems and institutions. This review adopts the policy typology applied in GEM reporting across all levels of education, from early childhood through to post-secondary education and training. The four categories are defined below as they relate to ECCE interventions, noting that considerable overlap may exist between policy categories and that a single initiative may also incorporate elements from across the typology. These are nevertheless valuable categories for navigating the literature on ECCE interventions, identifying approaches that respond to the challenges and opportunities within each context, and anticipating risks and benefits that may need to be addressed throughout policy design and implementation.

- **Institutional policies** concern the institutionalised components of the ECCE system, including the establishment of formal, regulated ECCE settings (such as preschool or nurturing care) and the formal rules, guidelines, and procedures that govern their internal operations, ensure compliance, and promote consistency across government ministries and oversight authorities. These policies reflect an institution’s values, legal obligations, and strategic goals. In the context of ECCE, institutional policies are essential for ensuring safe, inclusive, and high-quality learning environments for young children. These policies set the priorities and standards to support the efficient and effective delivery of ECCE services. They require adequate resourcing and institutional capacity to create an enabling environment for provision of quality ECCE, including financial and human resources, and coordination within and across line ministries.
- **Interventionist policies** are designed to ensure that all children, especially those with developmental delays or disabilities, receive equitable, high-quality support during their formative years. In the context of ECCE, they are targeted measures designed to support children who face specific challenges in reaping the benefits of their participation in ECCE services. These policies often involve public sector leadership, but increasingly engage private providers through partnerships and shared funding models. Interventionist policies often

highlight the tension between public interest and private incentives, especially when governments intervene to correct market failures or promote economic development.

- **Preventative policies** aim to address the effects of systemic inequalities *before* they manifest as barriers to ECCE participation. They involve proactively identifying and mitigating risk factors—such as socioeconomic disadvantage, geographic isolation or historical exclusion. They ensure that families and children have the health, wealth and opportunity necessary to engage with early learning that supports their educational and broader holistic outcomes.
- **Compensatory policies** offer alternatives for children and families who have missed out on opportunities to benefit from ECCE participation. These policies may be stop-gap measures while the universal system expands, or adapted approaches to meet a specific need or point in time. Given the wide diversity of ECCE provision models, the line between institutional and compensatory policies can be difficult to define – for example, non-formal ECCE settings may be fostered in a region to ‘compensate’ for a lack of institutional ECCE programs, but may in fact have intrinsic strengths in activating community capability and responding to children.

These policies work in integrated ways to achieve the SDG4 targets for early childhood education and readiness for school. A comprehensive suite of ECCE policies would include establishment and ongoing oversight of a high-quality, universal ECCE system (Institutional); additional support for all the children participating in that system who require it (Interventionist); direct support to children and families to overcome barriers to participation before they affect opportunities (Preventative); and alternative programs for children and families unable to benefit from institutionalised offerings (Compensatory).

1.1.1. Benefits of ECCE participation

A substantial body of literature supports the assumption underlying SDG 4.2, that participation in quality early childhood education will contribute to improved child outcomes (Ansari et al., 2020; Bassok et al; 2018) and readiness for school (Erlich et al., 2018, Helsabeck et al, 2021). It has long been understood that the early years, from birth to age eight, represent a critical phase in setting the foundations for later life outcomes. A substantial and growing body of research has assessed the impact of early childhood interventions on individual development and socio-economic benefits. For individuals, the benefits of participating in early childhood education programs include higher incomes, better health and greater life satisfaction (World Bank, 2018). For society, benefits include higher economic growth, better functioning institutions and greater social cohesion (McMahon, 2010; World Bank., 2018). Research shows that pre-primary education provides the highest return on investment of all education sub-sectors by reducing dropout rates and preventing grade repetition, thereby, increasing the efficiency of the education system (UNICEF, 2019).

In particular, investing in ECCE for children from disadvantaged backgrounds is most effective in reducing social costs. This is because early childhood programs can provide an opportunity for disadvantaged children to access nutrition, stimulation and safer environments, which helps with their development, ultimately increasing self-sufficiency and productivity in the long term (Heckman, n.d.).

Many studies have indicated that the benefits of ECCE can last into the school years and beyond. A longitudinal study, which followed children from poor households who received an ECCE intervention found that they were more likely to complete a higher level of education and receive higher incomes at age 30, than those who did not receive the intervention (Walker et al. 2022). The difference was also higher for women than for men. Shafiq et al.’s (2018) econometric study of longitudinal data from multiple LMIC’s found that attending preschool has led to significant long-term educational gains, with 8-10% of attendees more likely to progress through secondary schooling. In the US however, while some studies report positive differences in primary and secondary school, several studies suggest that the benefit is not sustained for more than one or two years (EEF, 2022). This variation suggests a need for gains made in the early years to be sustained by quality primary and secondary schooling.

1.1.2. Increasing ECCE participation worldwide

Given the evidence on ECCE participation and human development outcomes, there have been notable increases in international commitments to ensure greater access to quality and inclusive ECCE services. The UN has set an ambitious agenda under SDG Target 4.2 by 2030 to “ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education”. Research in ECCE recommends a benchmark of at least 80 percent of 4-year-old children participate in publicly subsidised and accredited early education services for at least 15 hours per week (Bennett, 2008).

As a result, many countries are now providing at least one year of free pre-primary education (Britto et al. 2015; Raikes et al. 2023). The increase in national and donor funding to the ECCE sector has also seen ECCE enrolment double over the last three decades, from an average of 30% in 1986 to over 60% in 2019 (UNESCO, 2021a). This reflects the combined efforts of governments and non-state actors who play a significant role in delivering ECCE services – with many countries having mixed public and private ECCE systems (including not-for-profit and for-profit, especially in higher-income countries). Successful ECCE systems require governments to work collaboratively with non-state partners.

Despite the substantial efforts of the many actors involved, access remains unequal, with the latest data showing that children in high-income countries are four times more likely to be enrolled in pre-primary education than those in low-income countries (UNESCO, 2021b). Enrolment rates and the pace of growth also vary significantly across different country contexts (OECD, 2017). For example, Latin America and East Asia have made significant gains in enrolment, while participation in parts of Sub-Saharan Africa and South Asia remain persistently low (UNESCO, 2022).

ECCE participation is a vital component in the ecosystem of support needed for children to thrive in the early years and start school ready to learn. Preparing children for transition to school is a multifaceted process that involves children, families, communities and the education system (Britto, 2012). Children need the foundational numeracy, literacy and socio-emotional skills to thrive in a school environment, while schools must be able to accommodate the diverse learning needs of children by providing qualified teachers, learning resources in an inclusive child friendly environment. Parents also contribute to school readiness by fostering nurturing home environments conducive to learning. While this review focuses on ECCE participation, it recognises that success in the early years requires combined effort from governments, ECCE providers, schools, families and communities.

The benefits of ECCE for children occur alongside benefits to their families, especially in enabling parental workforce participation. The interplay between ECCE availability and family life has profound economic and social implications, and is recognised as a factor in declining fertility rates in high-income countries. A recent systematic review identified ECCE as a key policy lever for increasing fertility (alongside parental leave and other financial benefits) (Rahman et al., 2025), with another recent report citing similar evidence from Spain, Japan, Norway, Germany and Italy (Gray et al., 2022). At the same time, the OECD cautions that ECCE alone cannot stem fertility decline, which also depends on other economic factors – such as housing – as well as gender and social norms (OECD, 2024).

1.1.3. Measuring impact on child outcomes

The achievement of SDG 4.2 not only tracks the participation in ECCE but also monitors their readiness for primary education. The Education 2030 Framework defines school readiness as “the achievement of developmental milestones across a range of domains including adequate health and nutritional status, and age-appropriate language, cognitive, social, and emotional development (UNESCO, 2016, p. 39). International studies using longitudinal data consistently link school readiness with later academic performance, particularly in reading and mathematics (Britto, 2012; Stith et al., 2003).

Support for ECCE participation in the early years is critical for addressing global disparities in school readiness and later academic success. Of the population of children under five in LMICs, 43% (250 million) are at risk of not reaching their developmental potential due to poverty and poor nutrition (Black et al., 2017). It is estimated that

10.75 million more will be off-track with their development due to the impact of COVID-19 (McCoy et al. 2021). Participation in quality ECCE can change children's learning and development trajectories and help LMICs (and all countries) achieve SDG4 goals.

The evidence base is still emerging around the impact of specific ECCE-related interventions on child outcomes. The initial scoping of literature suggests significant variability in outcome measurement, with most studies prioritising indicators of participation such as enrolment and attendance. About 80% of studies reported these participation metrics explicitly, reflecting global policy priorities around increasing ECCE coverage (see for example: Acevedo et al., 2018; Brinkman et al., 2017; Rao et al., 2023; Valenzuela et al., 2023; Vindrola et al., 2024; World Bank, 2015; World Bank, 2020). Outcomes related to graduation or ECCE program completion and successful transitions to primary schooling were less frequently examined, appearing explicitly in approximately 20% of studies. Transition metrics often lacked standardised or robust measurement, signalling a critical gap in the literature and reflecting the complex, multi-faceted nature of successful transitions to school.

Child development outcomes, particularly socio-emotional skills, cognitive readiness, and children's sense of belonging were relatively common in high- and middle-income settings (Correia et al, 2021) but far less consistently evaluated in low-income contexts. While standardised assessments (e.g., MELQO¹, IDELA²) and population surveys (e.g., ECDI2030³) were sometimes utilised, the wide variation in measurement tools complicated cross-study comparisons. Less than 30% of studies explicitly measured socio-emotional outcomes, despite their demonstrated importance for long-term success. Recent reviews have identified that there remains a significant gap in developing assessment tools suitable for monitoring the holistic learning outcomes of children in the early years, especially in ways that are suitable for monitoring trends and making comparisons between countries, languages, and cultures (Cloney et al, 2024).

ECCE participation can also deliver economic and social benefits to families alongside developmental benefits for the child. Maternal and caregiver outcomes, notably labour force participation, employment status, and related economic opportunities, emerged explicitly in approximately 12% of studies (see for example: Alexiadou et al., 2024; Behbehani et al., 2024; Hojman & Boo, 2022), most prominently in cash transfer and childcare subsidy evaluations. This modest representation indicated a notable gap in understanding broader socio-economic benefits of ECCE participation.

1.2. Aims

Primary objectives: The primary objective of this systematic review is to comprehensively identify, critically assess, and synthesise global evidence on policy interventions aimed at increasing participation in early childhood and pre-primary education for children from birth through six years of age. Specifically, the review examines the effectiveness of a broad spectrum of intervention-based policy reforms on ECCE participation including, centre-based services, home-based and community-based programs, caregiver incentives, workforce development initiatives and inclusive practices. Where relevant, these outcomes will explore the impact of children's enrolment in organised pre-primary education, their regular attendance, successful completion ("graduation") from ECCE programs, and smooth transitions into formal primary schooling.

Beyond educational progressions, the review investigates important child developmental outcomes, prioritising socio-emotional learning and children's sense of belonging within educational settings. Socio-emotional competencies developed in early childhood are strong predictors of academic success, healthy peer relationships, and overall wellbeing, making them central outcomes for early intervention. Additionally, recognising the interconnectedness of child development with family dynamics and economic wellbeing, the review aims to assess the impact of ECCE interventions on caregivers, particularly mothers. Improvements in ECCE availability and quality have the potential to significantly increase maternal labour force participation, employment stability, working hours, earnings, and overall economic empowerment, thereby contributing broadly to gender equality and household economic stability.

¹ (UNESCO, 2017)

² (Save the Children, 2017)

³ (UNICEF, 2021).

Equity considerations: This review will explicitly explore differential impacts of ECCE interventions according to child characteristics (such as sex, disability, language, and cultural minority status), household socioeconomic status, and geographic factors (rural versus urban residence). Understanding these subgroup differences is essential to inform policies and programs that aim to be inclusive and equitable. The review asks not only “what works” overall but also “for whom” – examining whether certain interventions are particularly effective (or ineffective) for specific sub-populations. The equity lens is critical because an intervention’s average impact may mask important disparities in who benefits. For instance, a policy of fee-free preschool might greatly increase participation among poor households but have minimal effect for wealthier families who already attend; conversely, a policy could inadvertently benefit already-advantaged groups unless carefully targeted. Thus, this review aims to highlight whether interventions promote equitable participation or risk widening gaps.

Contexts: The review attempts to explain how certain policy interventions respond to different contexts. It integrates insights from both quantitative impact evaluations and qualitative/process studies and grey literature to identify key implementation factors. These include both demand and supply factors such as, caregiver engagement approaches, educator qualifications and training, curricular frameworks (e.g., play-based vs. structured pedagogy), fee structures (universal vs. targeted), and broader contextual influences such as institutional capacity, labour market conditions, and prevailing social norms. By examining contextual factors, we acknowledge that an intervention’s success often depends on the environment – for example, a cash transfer might work in one country but not another due to differences in socio-cultural norms about preschool.

Lastly, the review will evaluate the quality and strength of existing evidence through systematic risk-of-bias assessments and apply a rapid review informed methodology to appraise the quality of available literature, noting where evidence is strong versus where findings are tentative. These objectives aim to produce a robust, policy-relevant synthesis capable of supporting policymakers, practitioners, and researchers to understand which early childhood interventions work most effectively to promote participation, for whom and under what circumstances.

1.3. Report structure

Chapter 1 provides an overview of the policy typology applied to this review and its relationship to SDG4, as well as introducing the review and its aims.

Chapter 2 details the review methodology, including the conceptual framework guiding the inquiry, the key research questions, search strategy, inclusion/exclusion criteria and the analytical approach.

Chapter 3 presents findings of the review, offering a synthesis of key developments in the field of ECCE, focusing on participation, retention and on what is working and for whom. It is organised into thematic sections covering the 4 policy types: institutional (e.g., universal access, integrated systems, financing, etc.), interventionist (e.g., inclusive programs, health interventions), preventative (e.g., cash transfers, parent engagement in ECCE) and compensatory (e.g. parent education, informal programs). This chapter discusses each theme with examples of specific interventions that have been effective, then summarises current gaps and needs. It also discusses the outcomes linked to effective ECCE policies, and outlines characteristics of successful interventions.

Chapter 4 summarises geographic trends in the literature to show how the general findings in Chapter 3 apply to different countries and regions, and the strength of evidence across different locations.

Chapter 5 distils the cross-cutting characteristics of successful interventions that can support participation and improved outcomes in ECCE settings. These features are key recommendations for policymakers looking to implement or scale policies for participation and retention.

This report is accompanied by key references, and a series of annexes including more detail on the study methodology, and full detail on identified effective interventions.

2. Methodology

This review employs a comprehensive and structured methodology designed to ensure rigour, replicability, and transparency across all stages of evidence synthesis. The primary aim of this approach was to collect, assess, and synthesise relevant academic and grey literature to provide a comprehensive understanding of early childhood participation and its outcomes, particularly focusing on emerging trends, practices, and gaps in policy and implementation across different contexts.

Our approach to the systematic review was guided by the approach recommended by Barends et al. (2017) as shown in Figure 2, which also aligns with the PRISMA 2020 statement (Page et al., 2021). Details to each of the steps that form this systematic review are described further below.

Figure 1. Systematic review processes



Background and scope of the review: The scope of this review is to comprehensively identify, critically assess, and synthesise global evidence on interventions aimed at increasing participation in Early Childhood Education for children from birth through six years of age, including centre-based services, home-based and community-based programmes, caregiver incentives, workforce development initiatives, and policy-level reforms, on key educational progression outcomes. An initial scoping review was conducted to comprehensively map existing research on interventions aimed at improving early childhood education participation and related outcomes for children aged birth to six years. This preliminary review provides a detailed understanding of the current evidence landscape, enabling refinement of the systematic review’s focus and identifying significant gaps and opportunities for further exploration.

Conceptual Framework and Key Research Questions: Based on the proposed conceptual framework by Goldfield et al., (2018) where participation in the early years learning and foundational development have been linked to access, household characteristics, educator quality, centre conditions, and the broader policy and social context, interventions through financial, material, infrastructure or informational inputs can also shape the motivations, behaviours, and capabilities of caregivers and providers.

2.1. Conceptual framework

Implementing interventions to support participation in early childhood settings is multifaceted and complex, involving socioeconomic, cultural, health, resource, political and educational challenges. Addressing these complexities requires a holistic approach that integrates local contexts, strengthens institutional frameworks and ensures sustainable resource allocation. By understanding and mitigating these challenges, stakeholders can better support the development and participation of children in these critical early years.

The conceptual framework (Figure 2) for this report was developed through an initial scan of relevant academic and grey literature. It provides a structured model for understanding how interventions targeting children from birth to six years old influence participation in early childhood education, promote developmental outcomes and create enabling conditions for caregiver empowerment. Drawing on a social determinants perspective (see Goldfeld et al, 2017), the framework reflects elements that can impact on participation in the early years, highlighting the ways in which early learning and development are inextricably linked to the home, community and broader policy environment.

Figure 2. Conceptual Framework



The conceptual framework brings together research evidence to date with factors that influence early childhood participation and outcomes, as well as development and learning trajectories. It includes several critical elements that have been validated through empirical research in Goldfeld et al.'s (2017) Social Determinant Framework, including socioeconomic status (SES), parental education and involvement, healthcare access and quality, nutrition, and safe and stimulating environments.

The framework rests on an ecological and systems-based understanding of how ECCE outcomes are shaped by interactions across multiple domains. Drawing on evidence from the fields of developmental psychology (see for example: Walkerdine, 2009; Whitebread, 2018; 2011), education research (see for example: Von Suchodoletz, 2023), and implementation science (see for example: Britto et al., 2018; Cook & Odom, 2013), the framework assumes that children's participation and progress in early learning environments depend not only on access to services, but also on household characteristics (Cooper & Stewart, 2021; Landry et al., 2008), educator quality

(McMullen et al, 2020), educator ratios (Perlman et al., 2017), centre conditions (Belsky, 2006 Burchinal et al., 2011) and the broader policy and social context (Pianta et al, 2009; Urban et al., 2012). It also recognises that interventions influence outcomes both directly and indirectly, often by shaping the motivations, behaviours, opportunities and capabilities of caregivers and providers.

At the heart of the framework is the notion that interventions function through a series of causal pathways that begin with inputs, such as financial resources, materials, infrastructure, or information, and proceed through implementation processes to generate intermediate outcomes, such as increased enrolment or improved educator practices, before resulting in final outcomes for children and caregivers. For the purposes of this review, the final outcomes of interest include increased participation in ECCE (as measured through enrolment, attendance, and completion of the early years), improved developmental outcomes (with particular attention to socio-emotional learning and sense of belonging), and enhanced opportunities for caregivers, especially women (as reflected in employment, income, or education participation).

Contextual factors are also central to the framework. Political commitment to ECCE, the strength of institutions responsible for service delivery, and broader social and economic conditions will all shape how interventions play out in practice. The presence or absence of complementary services—such as maternal health, nutrition, or social protection—may moderate impacts. The framework thus allows for analysis of not just whether interventions work, but under what conditions they are likely to succeed.

2.2. Key research questions

The following key research questions guide this review:

1. What types of interventions are most effective in increasing early childhood participation?
2. What institutional, interventionist and preventative policies are most effective in increasing participation rates in early childhood education programs?
3. What are the differential effects of these policy interventions based on child and household characteristics such as gender, poverty level, disability status, rurality, and linguistic or cultural identity within their contexts?
4. How do contextual factors, such as political commitment, institutional strength, and the presence of complementary services, influence the success of interventions aimed at increasing early childhood participation?
5. What are the long-term impacts of these interventions on educational outcomes at the school level?

These questions structured our evidence search and extraction, ensuring we captured not only outcomes but also contextual nuances and equity considerations.

2.3. Search strategy

An extensive search for relevant literature published from 2015 to 2025 (inclusive) to capture the most recent decade of research and policy reports was undertaken. The rationale for starting at 2015 was to align with the period of the SDGs and recent global initiatives on ECCE, while avoiding an overly broad scope that could dilute relevance. We included both scholarly sources (peer-reviewed journal articles, conference papers, book chapters) and grey literature (reports from international organisations, NGOs, government policy documents, evaluation reports, etc.), recognising that many valuable ECCE intervention studies and policy analyses are found in reports and not just academic journals.

The aim of the systemic search was to primarily find information on the following key topics:

- Trends related to young children’s educational access, participation, engagement, and retention in ECCE settings globally.

- Country-specific factors shaping equitable participation and engagement in early childhood education, such as the learning environment, and aspects contributing to their safety, security, and wellbeing.
- High-potential interventions for attracting, supporting, and retaining children in ECCE settings, including consideration of the needs of children and families from marginalised groups, who are at high-risk of early dropouts or failure to transition to school.
- Key learnings and policy recommendations that have the potential for further research and investment.

The review approach and conceptual framework presented above guided the following three key activities:

1. A rapid scan of academic and grey literature to explore the value of early childhood participation, including highlighting effective policies and programs, and identification of current gaps and areas of need.
2. A systematic screening of academic databases and knowledge repositories to establish an evidence base for identification of effective policy interventions. This activity provides evidence for common characteristics of effective interventions and ensures a common understanding of successful elements that could be considered by UNESCO as supporting participation in early childhood education and care.
3. A review of grey (non-academic) literature, policy, and other planning documents focused on relevant interventions that support children aged 0-6, and their families, to participate in ECCE.

Search strategy: The review followed a structured process consistent with best practice in evidence collation.

1. Searches were performed across major bibliographic databases, including A+, ERIC, Web of Science, PsycINFO, EconLit, CINAHL, and region-specific databases such as SEAMEO, using the inclusion criteria and proximity searches as filters. Relevant results from each search were then exported to *Covidence* and screened based on titles and article abstracts. Those that are determined to be relevant progressed to full-text screening and were selected for data extraction. *Covidence* can also be extracted to Zotero.
2. These searches were then complemented by a targeted exploration of grey literature sources including organisational repositories (e.g. UNICEF, UNESCO, World Bank Early Learning Partnership, OECD), policy documentation, and conference proceedings. Relevant documents were also identified through a snowball search.
3. Publications from 2015 onwards were included to maintain contemporary relevance, given substantial changes in global ECCE policy landscapes over recent decades.
4. The search and screening processes were documented using a PRISMA 2020 flowchart (Page et al., 2021).

Search terms and search strings: The search terms were derived from the PICO framework (Table 3). The PICO (Problem, Intervention, Context) framework (Eriksen & Frandsen, 2018) has been constructed with clear and meaningful review objectives within the boundaries of the inclusion criteria. Table 3 describes the PICO which has been constructed with clear and meaningful review objectives to focus on research questions, to ensure that they are specific, and answerable. These clarify the scope of the review and form the basis for the specific inclusion criteria for documents to be included in the review.

The search was then conducted using variations of several keywords through application of Boolean search strings. Comprehensive search strings combining terms related to early childhood or pre-primary education, participation or attendance, and interventions or policies were developed, and an initial scoping search was done to refine keywords. Search strings included specific terms such as, “participation”, “enrolment”, “outcomes” and “policy”. Some limiters will also be applied to the searches, such as publication dates (last 10 years only), language (English), and education settings (ISCED 0). We searched multiple academic databases (e.g., ERIC, PsycINFO, Scopus), search engines (Google Scholar), and targeted relevant organisational websites (e.g., UNICEF, UNESCO, World Bank, OECD) for reports. Additionally, we scanned the reference lists of key publications and previous reviews to identify further sources. In total, our search yielded 18,940 records (after removing duplicates) to screen at title/abstract level.

An example search string is as follows:

(“Infant” OR “toddler” OR “baby” OR “child*” OR “student*” OR “pre-schooler*” OR “kindergartener*” OR “pupil*”) AND (“early childhood education” OR “early learning” OR “preschool” OR “pre-primary education” OR “nursery school” OR “kindergarten” OR “ECCE” OR “early years education”) AND (“participat*” OR “enrol*” OR “attend*” OR “access*” OR “engag*” OR “uptake”) AND (“polic*” OR “intervention” OR “strategy” OR “initiative” OR “government support” OR “public investment”) AND (“formal education” OR “informal education” OR “non-formal education” OR “community-based

education" OR "home-based learning") AND ("low-income countries" OR "low income countries" OR "developing countries" OR "low and middle income countries" OR "LMICs" OR "middle income countries" OR "high income countries" OR "OECD countries" OR "global south" OR "global north") AND ("outcome*" OR "result*")

Sources: The following sources were systematically searched to identify academic and grey literature (Table 2).

Table 2. List of sources for the review

International organisations	Academic databases/platforms	Grey literature
<ul style="list-style-type: none"> ● ADB ● DFAT ● FCDO ● UNESCO ● UNGEI ● USAID ● UNICEF ● GPE ● World Bank ● SEAMEO ● ASEAN ● Save the Children ● World Vision 	<ul style="list-style-type: none"> ● A+ ● EBSCO ● Proquest ● Web of Science ● Google Scholar ● Education Source Complete ● ERIC ● CINAHL 	<ul style="list-style-type: none"> ● Google searches ● Reference lists of reports ● Previous reviews and reports ● World Bank repository



Table 3. Population, Intervention, Context and Outcomes (PICO)

POPULATION	INTERVENTION	CONTEXT	OUTCOMES OF INTEREST	
	Intervention/Prevention Problems	Foci/Delivery		
Child-age 0-6 years Infant and toddler Baby Child Student Pre-schooler Kindergartener Pupil Educational settings Education <ul style="list-style-type: none"> ○ Informal Childcare ○ Centre based Daycare ○ Preschool ○ Pre-K ○ Kindergarten ○ Combined ○ Alternative models/pathways (Montessori, Steiner etc) Special/inclusive education Community based care Home based care Out-of-school-hours care Out of school status	Child/Family/Community <ul style="list-style-type: none"> ○ Gender ○ Home environment ○ Location ○ Poverty ○ Disability / neurodiversity ○ Family education ○ Language background ○ Cultural background ○ Family engagement ○ Religious affiliation ○ Trauma ○ Maternal health ○ Family resources ○ Parental attitudes ○ Knowledge and social capital ○ Access to care Environmental barriers (climate, transport, infrastructure etc) Institution level <ul style="list-style-type: none"> ○ Learning environment ○ Learning support/differentiation ○ Structural/process quality ○ Intensity ○ Resources ○ Curricula ○ Educator capacity and availability System level <ul style="list-style-type: none"> ○ Legislative/regulatory/standards frameworks ○ Sector guidelines ○ Financial investment ○ Equity of Access ○ Quality ○ Workforce Monitoring	Face to face Home based/schooling Centre based Foundational Learning Early literacy Early diagnosis and supports Social and emotional learning (SEL) skills Social-emotional Development Whole-centre; universal; targeted; Program Framework/Curriculum Intervention; Initiative; Package; Training; Supports; Parent Education, Educator professional development	Global Humanitarian Crisis Refugee Displacement/Displaced Conflict Emergency Low-income countries Middle income countries LIC HIC LMIC Developing countries Disadvantage Marginalized Indigenous/Ethic minority	Intermediary outcomes <ul style="list-style-type: none"> ○ Participation and graduation ○ Transition to school ○ Early engagement ○ Connectedness ○ Behavioural outcomes ○ Increased labour force participation/income/skills of family ○ Improved fill-rate/utilisation of centres ○ Community engagement (participation, resource sharing) Long term outcomes <ul style="list-style-type: none"> ○ Learning outcomes ○ Social, emotional and health outcomes ○ Narrowing equity gaps ○ School transition, school completion ○ Employment ○ Reduce poverty gap Disability Inclusion Gender Equity Parental opportunities Socioeconomic status Keywords that might exclude a study Non formal education programmes Solely home-based programmes Solely school based

2.4. Inclusion criteria

Clear inclusion criteria (see Table 4) were developed following an initial scan of the literature to support the evidence selection process and to restrict results obtained by using the search strings to only those that are relevant to the scope of the review. Table summarises the inclusion criteria.

Table 4. Search inclusion criteria

Search Criteria	Description
Publication date	2015 to 2025
Countries	Studies conducted in HI and OECD countries, LMICs, EiE settings
Language	Studies in English language (and where possible, translated abstracts were also included)
Resource types	Scholarly published literature including journal articles, book chapters and conference proceedings, frameworks that focus on early childhood participation. Grey literature including policy documents and evaluation reports were also included, as were secondary data sources where feasible.
Relevance	Includes information relevant to one or more research questions, studies needed to assess an intervention or policy aimed (directly or indirectly) at improving children's early education access, attendance, participation, or retention.
Outcomes	Includes outcome measures related to ECCE participation and/or child development outcomes linked to ECCE participation and/or retention
Filters	Full Text Not editorials, commentary, books, theses (dissertations)

To address the key research questions, we have only included texts in this review that attempt to make causal links between a policy intervention and outcomes related to ECCE participation and retention. Specifically, the review considers:

- **Publication:** All included texts needed to be published between January 2015 to January 2025 in English language and in peer-reviewed journals, commissioned reports, or grey literature.
- Studies where participants are randomly assigned to treatment and comparison groups (experimental study designs)
- Studies where assignment to treatment and comparison group is based on other known allocation rules, including a threshold on a continuous variable (regression discontinuity designs) or exogenous geographical variation in the treatment allocation (natural experiments);
- Studies with non-random assignment to treatment and comparison group, provided they include pre-and post-test measures of the outcome variables of interest to ensure equity between groups on the baseline measure, as well as use appropriate methods to control for selection bias (Steiner et al, 2010; 2011) and confounding, such as statistical matching (for example, propensity score matching, or covariate matching), regression adjustment (for example, difference-in-differences, and single difference regression analysis, instrumental variables, and 'Heckman' selection models).
- Studies without a comparison group (e.g. single-group pre-post studies) were included only if they had at least pre- and post-intervention data on outcomes; simple post-intervention descriptive reports without baseline or comparison were generally excluded due to high risk of bias.

- Student outcomes were measured, where possible, using valid and reliable instruments and approaches (e.g., validated scales, screening instruments in the school/ non-formal educational settings, interviews, and focus-group discussions). Self-reported outcomes were prioritised over teacher or parent reports.
- Mixed-methods and qualitative studies were included if they shed light on how interventions were implemented or perceived (e.g. context and characteristics of effective interventions). However, purely qualitative studies without any outcome evaluation were supplementary and not counted as core “effect” evidence.
- Finally, our interest is in identifying the evidence on the effects of an intervention implemented as part of a program under circumstances that approach ‘real-world’ practice, so-called effectiveness studies. These types of studies stand in contrast to efficacy trials which test an intervention under ideal and controlled conditions to maximise the likelihood of observing an effect, if one exists.

Sources were also assessed for credibility, particularly in the case of grey literature, which needs to be produced by a recognised institution, university, government body, or well-established organisation.

2.5. Exclusion criteria

Exclusion criteria included commentaries, opinion pieces, editorials, news articles, and materials that are not publicly accessible. This review has also excluded interventions where participation is not the primary outcome. These include general community-wide health or nutrition interventions, microcredit, roadbuilding or infrastructure not directly tied to school access, and stand-alone reproductive health programmes. Similarly, distance education and special education were excluded due to their distinct objectives and implementation models. The focus remains on ECCE and pre-primary participation.

2.6. Evidence selection and reporting

Using the inclusion/criteria previously described, the initial search identified 27,164 results. Given the large volume of results, all the search records retrieved from the relevant academic databases and grey literature were imported into *Covidence* and screened for eligibility. After duplicates had been removed there was a total of 18,085 records available for screening. At this stage, records were excluded based on eligibility (they did not fully meet the inclusion criteria). This left few results for full-text retrieval and data extraction. Common reasons for exclusion include a focus on medical interventions (e.g. clinical trials, education, developmental needs), a focus on teacher education, maternal health, and lack of clear references to participation in ECCE.

After discussion with the GEM Report team, a secondary search was conducted on the basis of attendance outcomes data only (excluding gains in literacy, numeracy and socio-emotional learning). This resulted in a retrieval of 1,353 results from databases such as Academic Search Alumni Edition, Academic Search Complete, CINAHL Complete, EconLit, Education Source, ERIC, SocINDEX and 60 records from Google Scholar, imported into *Covidence*. After removing duplicates (N=908), 505 titles and abstracts were screened for relevance by the reviewers who then excluded non-relevant titles (N=491). The next stage of the screening included a sequential examination of all titles and abstracts followed by decision to retain or reject each study. Decisions were made by two independent coders separately using the *Covidence* tool. Coders reached an agreement of 89.6% at this stage. Any disagreements were discussed, reviewed and a consensus reached. Common reasons for exclusion at this stage included: the intervention described was not actually about ECCE participation (or not at the early childhood level), lack of any outcome data, duplication (e.g., multiple reports on the same program – the most detailed or latest source were included and duplicates excluded), or not meeting the study design threshold (for example, a case study report with no evaluative component). The full texts of the remaining studies (N= 64) were then thoroughly reviewed for eligibility.

It was evident from the reference lists in selected articles that grey (non-peer-reviewed) literature also plays an important role in the international evidence base for ECCE interventions. A total of 95 grey literature documents



were then further identified through focussed searches by screening review reports, scanning the bibliographies of relevant past reports and searching on select platforms such as the World Bank Open Knowledge Repository and more generally through Google Scholar. By the end of this extensive screening process, a total of 84 texts were identified for inclusion in this review.

Annex 2 provides the list of key documents that were included in this systematic review, noting their interventions and outcomes.

2.6.1. Selection and data extraction

Full-text screening of selected abstracts was undertaken by two reviewers. To ensure reliability and consistency across the reviewers in the selection of studies, two researchers coded a random selection of included literature (at least 10% of sources), reaching an agreement of 87.4% about inclusion and exclusion decisions. In some cases when sufficient information about an intervention was not available from a study, reviewers attempted to supplement this information by hand-searching program websites, and any additional relevant data were recorded. All included documents and those excluded in the final stages of the screening process were coded with a unique ID to avoid duplication and accidental deletion of a record.

A simplified PRISMA is provided in Annex 1 (Figure 3) to explain the screening and selection decisions.

Data Extraction: The following outlines the data extraction procedure reviewers used to extract information from literature that met the inclusion criteria and identified as relevant for review. For each included study, details were extracted based on the following categories:

- Source (author, year)
- Location(s)
- Study design/type
- Contexts
- Interventions
- Sample characteristics (sample size, target population)
- Outcomes measured
- Key findings (effects on participation and any child outcomes).

Any mentions or references of implementation issues, moderators or subgroup effects were also noted separately.

Artificial Intelligence (AI) tools—*Covidence* and Microsoft Copilot—were used to assist with the data analysis and summarisation, enhancing efficiency and consistency; all outputs were verified to ensure accuracy. Data from included literature were extracted using the following procedure shown in Table 5. This process was conducted both in Excel and *Covidence*, due to the volume of the academic data set.

Table 5. Data coding categories

Category	Description of data to be extracted
Study characteristics	<ul style="list-style-type: none"> ● Publication date ● Country
Include at Full-text review	<ul style="list-style-type: none"> ● Yes ● No ● Unsure

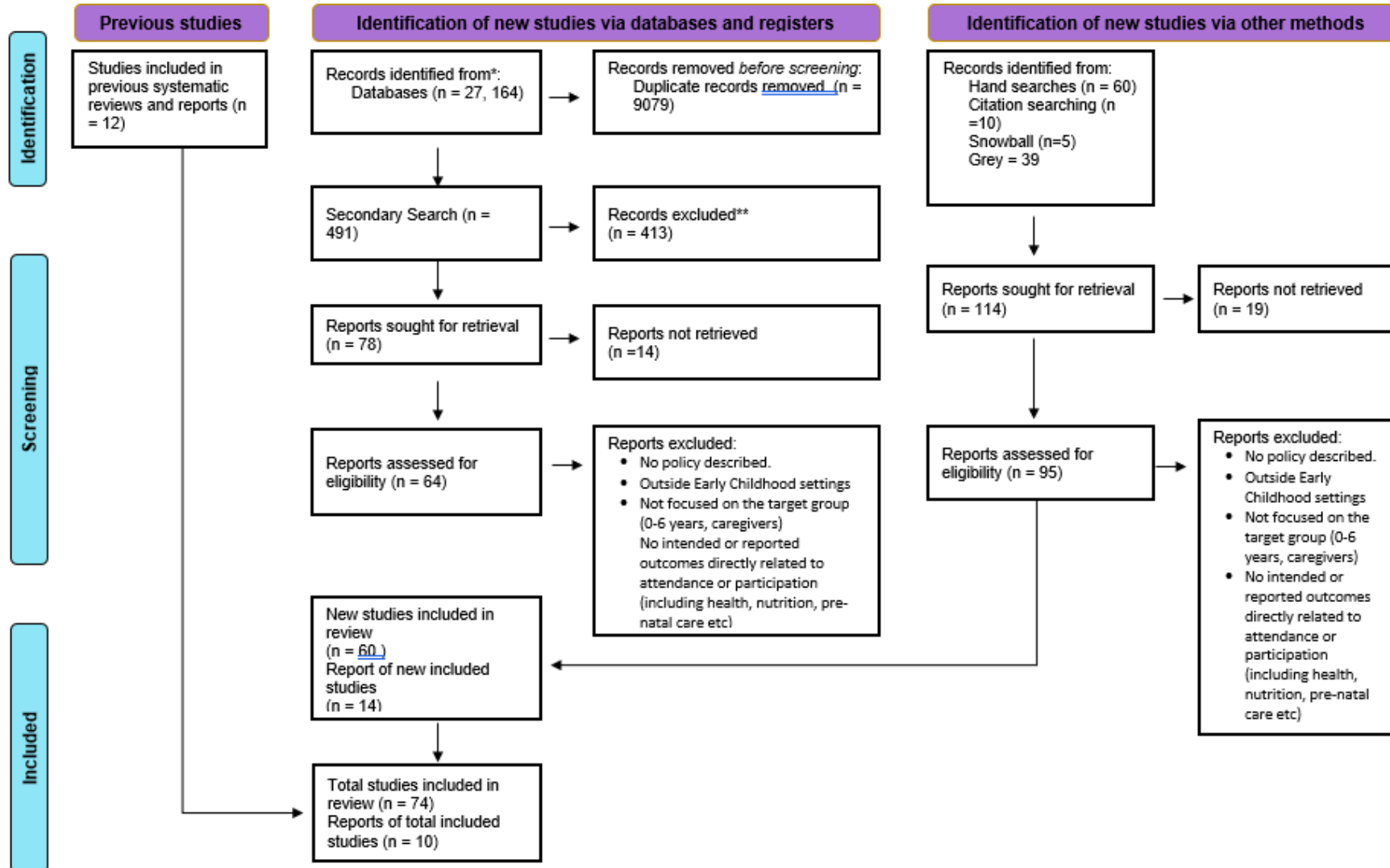
Category	Description of data to be extracted
Participants/sample	Definition/description of study participants
Description of 'intervention'	<ul style="list-style-type: none"> ● Financial ● Behavioural/attitudinal ● Infrastructural ● Informational
Outcomes of 'intervention'	<p>Outcome assessment process</p> <ul style="list-style-type: none"> ● Measures used (name), validated or not? Extent of validation? ● Time of assessment ● Follow-up period (if any) ● Outcomes assessed <p>Outcome assessment (result)</p> <ul style="list-style-type: none"> ● Summary of results ● Effect size or mean difference with SD/SE/variance stats for outcomes described in process
Conclusion	Summary of main conclusions in the study including practice and policy implications
Study quality (Low, medium, high)	<p>Empirical study (primary), depending on methods</p> <ul style="list-style-type: none"> ● Methodological design ● Tool validity ● Data interpretation accuracy ● Coherence <p>Empirical study (secondary, review)</p> <ul style="list-style-type: none"> ● Coverage ● Quality assessment ● Validity of results ● Application of results ● Heterogeneity of included studies <p>Grey literature (non-empirical)</p> <ul style="list-style-type: none"> ● Accuracy ● Authority ● Coverage ● Objectivity ● Date ● Significance



Critical Appraisal: Assessing the quality of evidence included in the review is key. Non-empirical literature, including systematic reviews and literature review articles, were critically appraised using the Critical Appraisal Skills Programme (CASP) Systematic Review Checklist. Grey literature was also critically appraised using a tailored approach considering relevant criteria from other checklists, such as the AACODS (Accuracy, Authority, Coverage, Objectivity, Date, Significance) checklist. All included empirical literature was appraised using the Joanna Briggs checklist, which is widely recognised as one of the most comprehensive tools to capture study quality (see Hannes, Lockwood, & Pearson, 2010). Based on the results of this list, we also considered whether qualitative and mixed methods studies that were deemed ‘high quality’ contributed rich insights (see Noblit & Hare, 1988), particularly in underrepresented population groups, and therefore offered as much value as the experimental studies. The reviewers, with guidance from the GEM team, agreed this was the case and the studies were therefore included.



Figure 3. PRISMA flow diagram showing the identification and selection of included sources from literature and other sources



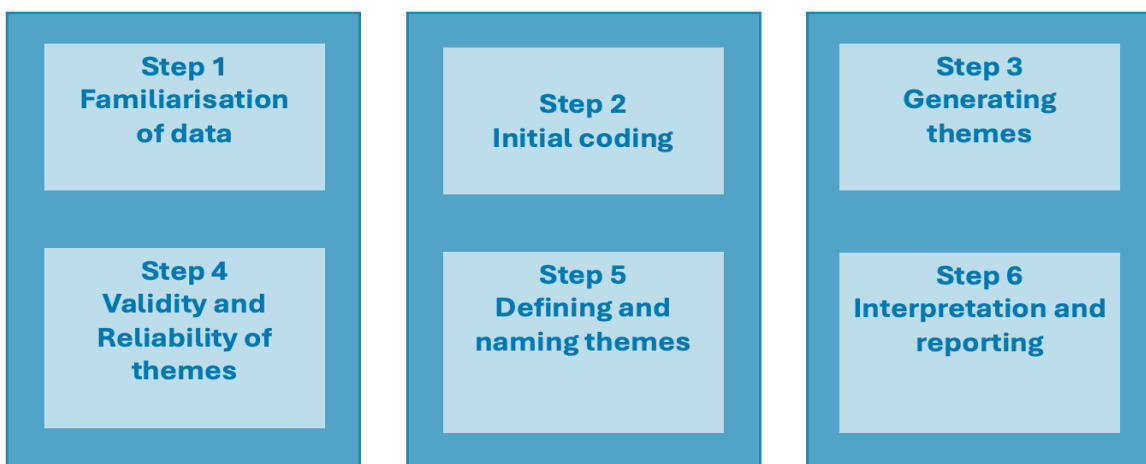
2.7. Analysis approach

After extraction and critical appraisal, thematic synthesis was undertaken in order to identify shared features and relationships between significant variables (such as the nature and type of interventions present and the degree to which these interventions impact on ECCE participation). The aim of thematic synthesis was to develop a meaningful picture of what the research tells us works best to support ECCE participation and retention, and to understand common gaps identified across studies. Given that not all literature was quantitative in nature, thematic synthesis was selected as an established method used in systematic reviews, to synthesise the findings of multiple studies using a range of methods by identifying patterns and recurring themes within the data.

For robustness of insights, the review team also looked for converging evidence across studies; for instance, if multiple independent evaluations in different countries all found that removing fees increased enrolment, it would be considered a strong finding. Where findings diverged (e.g., one study finds a positive effect, another finds no effect for a similar intervention), the review team explored possible reasons (differences in context or implementation).

The process for analysis is provided in more detail below (adapted from Braun and Clarke's established process for thematic analysis):

Figure 4. Process for thematic analysis



- Step 1 involves review of the data, and discussion with team members.
- Step 2: Initial coding- in the case of this review, the team applied deductive analysis principles to look first for examples of institutional policy, preventative policy, and interventionist policy.
- Step 3: Development of descriptive themes - involved reviewers individually generating preliminary codes and sub codes, that described the identified interventions and their common characteristics.
- Step 4: Validity and reliability of themes involved discussion and review of the preliminary codes and themes, discussed and agreed upon by the team members, and compared with other team members.
- Step 5: Defining and naming themes involved the generation of the final analytical themes - coordinated approaches, targeted interventions, universal access, equity and inclusion.
- Step 6: Interpretation and Reporting involved a final review of the themes. As a result of this process, four key themes were identified across 84 sources, as highlighted in the table below.

Table 6. Classification of the identified documents with policy interventions into key themes

Themes	Count of texts
Coordinated approaches	18
Targeted interventions	20
Universal access	30
Equity and inclusion	16

The key themes across the interventions from the included documents were as follows:

- **Coordinated approaches** – 18 interventions covered this theme, which include multi sectoral approaches to ECCE participation, including feeding and nutrition policies in ECCE settings, immunisation programs, obesity prevention, maternal health and family and child mental health promotion, employment policies, and parental involvement interventions.
- **Targeted interventions** – 20 interventions covered this theme, which include cash transfer programs, parent cash-for-childcare schemes, resourcing interventions, and other financially incentivised or subsidised policy interventions.
- **Universal access** – 29 interventions covered this theme, which include policies and legislations relating to full time attendance, mandatory attendance at preschool, free access to ECCE, and government backed expansion of ECCE and pre-primary education.
- **Equity and inclusion** – 17 interventions covered this theme which included interventions focused on creating equitable participation opportunities, improving resourcing and access for linguistic or ethnic minority groups, including refugee safe spaces, disability inclusive practices, and targeted programs for systemically excluded or oppressed families.

These themes enabled efficient, consistent categorisation of studies for subsequent allocation to the policy types identified in the typology above. Universal access interventions were largely institutional, while targeted and equity and inclusion initiatives were interventionist (targeting specific groups within ECCE systems), preventative (addressing participation barriers) or compensatory. Coordinated approaches tended to intersect between categories and demonstrated the value of integrated models.

2.8. Limitations

Given the large volume of research on the topic of early childhood participation, not all interventions can be captured in this report. The review was limited to documents published between January 2015 to 2025, excluding interventions completed prior to this period, unless the findings from those were published during this limited search timeframe. Thus, although the characteristics presented in this report are common in those interventions that promote equitable early childhood participation, the list is illustrative only.

Additionally, the review team limited the scope of the search to English texts only, introducing potential language bias. For instance, a preliminary review identified numerous texts in French and Spanish, reflective of policy reforms and ongoing investments in the field of ECCE in Africa and Latin America. The review team used Covidence to support the screening, which did identify some texts in languages other than English, and these are included in the review. However, the list is not exhaustive, and further research could expand on the findings presented in this report.

Moreover, the regional representation across the data set was uneven, with a noticeable concentration of evidence from high-income settings, limiting the generalisability of findings to more diverse or underrepresented regions. There also remains a scarcity of quasi-experimental evaluations within the reviewed literature, which constrains the strength of causal inferences drawn.



Finally, it is likely that additional effective practices exist globally but remain undocumented or unpublished and thus fall outside the scope of this review. Collectively, these limitations may influence the comprehensiveness and representativeness of the findings, and readers should interpret the conclusions with appropriate caution, particularly when considering applicability across diverse contexts.

3. Review findings: What works and why

The findings describe how different countries and regions have engaged with each policy type in the typology above to improve participation in ECCE and lift outcomes for children. The limitations on measurement of child outcomes noted above – as well as the complexity arising from the multiple intersecting factors that impact early learning and development – mean that it is difficult to establish direct causal relationships between interventions and outcomes. Based on the literature, it is nevertheless possible to identify the contextual challenges that each type of policy is typically used to address (noting that multiple contextual challenges may exist, requiring multiple intersecting interventions). It is also possible to identify successful interventions under each policy type for which some evidence of effectiveness exists in the literature. The strength of evidence for each solution is summarised below, to help policymakers decide which may be most promising for their contexts.

A tabular summary of these findings is provided in Annex 2, highlighting exemplary initiatives.

3.1. Institutional policies

Institutional policies featured prominently in the literature, as countries at all income levels strive to establish and maintain universal, high-quality ECCE systems. Formal ECCE systems may take many forms across and within contexts, including centre-based, school-based and home-based programs that meet a diversity of child and family needs. The age of commencement may also vary, with free, compulsory programs often targeted at the year before fulltime school (often known as preschool or kindergarten programs) but forming part of complex systems that also include education or nurturing care for younger age groups. In synthesising findings, this review focuses on the institutionalisation of pre-primary education through policy, regulation and financing, as most relevant to the SDG4 goal.

Institutional interventions do not only involve expansion of ECCE service provision, but also the system settings that shape access and quality, such as changes to governance, financing, and regulatory frameworks. These may include policies that subsidise or abolish fees, expand eligibility for publicly funded services, strengthen licensing and quality assurance systems, or encourage public-private partnerships. Although more distal, system-level reforms can have far-reaching effects on both the supply and demand for ECCE (Inclusive Education and Care, 2024). They may also create conditions under which lower-level interventions can be scaled effectively and sustained over time.

3.1.1. Contextual challenges

The following contextual challenges drive the development of institutional ECCE policies:

Universal access. The minimum recommendation for countries to provide at least one year of universal quality pre-primary education is far from being realised, with approximately 50 percent of children globally not enrolled in pre-primary education (UNESCO, 2021a). While universal access to ECCE has expanded over the last decade, disparities in enrolment exist across different geographic regions and income groups. For example, high-income countries have achieved close to 80% Gross Enrolment Ratio (GER), whereas low-income countries average only 22% pre-primary enrolment and is only expected to reach only 32% by 2030, thereby falling short of the SDG 4.2 target of universal access (UNICEF, 2019). Significant disparities also exist within countries in access and participation.

Achieving universal access to ECCE requires more than simply expanding the number of ECCE services. While expanding access has been reported to increase pre-primary enrolments (e.g. Agirdag, Yazizi & Sierens, 2015,

CPAG, 2020, Qi & Melhuish, 2017), rapid expansion of ECCE services in some contexts has led to zero or little change in the enrolment rates (UNESCO, 2021b). This could be due to weak institutional structures relating to the supply side (including lack of teacher preparedness and training to reach all eligible children), as well as demand-side challenges with parents failing to enrol their children at the compulsory age. This suggests that implementation of ECCE frameworks require responsive sector planning and investment to make it universally accessible.

Workforce plays a critical role in institutional ECCE policies across the globe, with many systems facing long-term challenges in maintaining an adequate supply of skilled ECCE teachers and educators. Labour conditions are widely recognised as undermining the quality and sustainability in ECCE, with low pay, limited career prospects and low professional status hampering workforce development even in high-income countries. COVID-19 intensified instability in the sector as rapid shifts in families' use of ECCE services had flow-on effects for the ECCE workforce. Post-COVID, ongoing ECCE policy reforms continue to escalate pressures on workforce supply and create risk of burnout among current staff.

A thriving ECCE workforce is not only essential for ensuring an adequate supply of ECCE services: it is also key to ensuring that increased participation delivers on its promise of improving outcomes. In early childhood settings, the quality of educator-child interaction is among the most important determinants of child outcomes (Social Connection: Curriculum Resource, 2024). Training, mentoring, and improved employment conditions for ECCE workers can significantly enhance their ability to deliver engaging, responsive, and developmentally appropriate learning experiences (Soper, 2023). Effective workforce development strategies improve not only the quality of instruction but also programme sustainability by increasing job satisfaction and retention among educators.

Quality of early childhood services is a critical factor in ensuring that expanded ECCE participation leads to uplift in child outcomes and readiness for school. While access to ECCE has expanded, quality remains uneven and often poorly regulated in many contexts. Although not the focus of this review, the quality of ECCE services has an established link to parent choices and participation in ECCE, especially in high income countries (Borisova et al., 2019). Quality gaps jeopardise the effectiveness of participation policies, as substandard experiences fail to deliver intended cognitive, emotional, and social benefits, and can discourage parents from continuing to send their children to care.

3.1.2. Policy solutions

The following potential solutions emerged from this review to guide institutional ECCE policies:

Strong, visible commitment

Achieving universal access requires governments to make a strong, visible commitment to ECCE participation. Making ECCE free and compulsory is arguably the strongest universal access policy that governments can adopt, sending an unequivocal message about ECCE's importance. On average, countries that have adopted free and compulsory pre-primary education have seen an increase in their enrolment ratios for ECCE (e.g. Campbell, Gambaro & Stewart, 2018). In high-income countries with free and compulsory ECCE (such as Germany and the United Kingdom), participation rates are higher and access is more equitable compared to those where pre-school is optional (like the United States) (IEA, 2016). In the Pacific, the introduction of free and compulsory ECCE has driven enrolments, with Fiji, Tuvalu and Niue achieving near universal coverage (Vindrola, Ghawi & Li, 2024).

It is recognised that free, compulsory ECCE may not be appropriate in all contexts due to families' preferences for participation, the age of children to which ECCE is targeted and the flow of public and private resources into the ECCE system. Some countries have adopted variations on free, compulsory ECCE – such as optional but fully subsidised preschool – that still show a powerful commitment to universal access to quality ECCE. There is a strong connection between universal access policies and ECCE attendance, as it sets a clear mandate for governments to prioritise early childhood education in their legal frameworks. It also sends a signal to families that pre-school is valued as a public good.

The following case box shows how the Nordic model of ECCE provision – widely upheld as a global exemplar – positions ECCE as both a public good that warrants significant government investment, delivering benefits for children as well as increased parental workforce participation. At the same time, the Nordic systems support parental choice in balancing work and ECCE participation.

BOX 1. FAMILY ENGAGEMENT IN NORDIC COUNTRIES (Alexiadou et al., 2022)

This study explores how early childhood development (ECD) policies have evolved in Nordic countries, particularly Sweden and Finland over time. The Nordic ECCE systems are seen to promote family engagement indirectly by:

- Guaranteeing universal access to childcare regardless of parental employment status.
- Supporting work–family balance through generous parental leave and subsidized childcare.
- Encouraging parental choice in early education settings.

The legislation positions ECCE as both a support for families and a means to promote children’s balanced development, highlighting the importance of continuous, safe, and warm relationships.

Ongoing challenges to Family Engagement include:

1. **Shifting Policy Rationales** - Movement from child-centred approaches to labour market-driven and educational performance goals may dilute the focus on family needs and values.
2. **Governance Complexity** - Multiple layers of governance (national, municipal) can create fragmentation, making it harder for families to navigate services or influence decisions.
3. **Institutional Inertia** - Long-standing structures and traditions may resist change, limiting innovative family engagement strategies.
4. **Funding Debates** - While Nordic countries invest heavily in ECCE, ongoing debates about resource allocation and efficiency could impact the accessibility and responsiveness of services to family needs.

Evidence-based duration and dosage

Designing institutional policies requires consideration of appropriate duration and ‘dosage’, or the length of time children spend in ECCE to achieve desired benefits. There is strong evidence to suggest positive effects of ECCE participation at an early age on longer-term learning outcomes. Results from PISA 2015 show that children who attend ECCE for at least two years, perform better than their peers at age 15 (OECD, 2017). Even when accounting for socio-economic status, the difference was still significant in half of the countries surveyed. The link between ECCE enrolment and learning performance was also stronger in education systems where participation lasts more than two years (OECD, 2017). Bennett (2008) suggests a benchmark of “at least 25 percent of all children under 3 years accessing places in publicly subsidised and regulated childcare services.”

Research conducted by the Education Endowment Fund (EEF, 2022) found that starting education at an earlier age appears to have a positive impact on learning outcomes, where children who attend an ECCE setting before turning three gain an additional six months compared to those who start a year later. In a study examining ECCE duration and dosage in high-performing systems, it was found that early starting age and longer duration of universal pre-school is more likely to lead to better attendance and school readiness (Helsabeck et al, 2021; OECD, 2025). For example, in the Netherlands and Belgium, the introduction of two years of compulsory ECCE has seen near universal participation by age 4 and higher learning outcomes at Grade 1, compared with England where children start at a later age. Similar cohort studies in Brazil (Correia-Zanini et al., 2018) and Chile (Cortázar, 2015) showed longitudinal gains in reading and math.

Research on the impact of full-time compared to part-time ECCE is less conclusive than length of participation (OECD, 2017). Studies also suggest that any learning gains related to extra hours of ECCE may not result in sustained positive outcomes into primary school (EEF, 2022). However, studies examining the impact of full-day ECCE in low SES settings found that increasing the total number of hours in ECCE was associated with positive learning outcomes for the most disadvantaged students. This was a similar finding in rural Indonesia, where children who were enrolled in more hours of ECCE performed better than their peers (Brinkman et al., 2017).

The case box below shows how duration and dose was adjusted in Ethiopia to meet contextual constraints, while still adhering as closely as possible to an evidence-based intervention design:

BOX 2. ONE-YEAR OF FREE AND ACCESSIBLE PRE-PRIMARY EDUCATION IN ETHIOPIA: THE 0 CLASS INITIATIVE (Borisova et al., 2019)

Ethiopia's early childhood education policy and interventions focused on expanding universal access to pre-primary education through the National Policy Framework for Early Childhood Care and Education (2010).

Key measures included:

- **Policy Framework and Implementation Plan:** The Ministry of Education took a leading role in coordinating preschool education, emphasizing school readiness. The Strategic Operational Plan outlined short- and long-term strategies to universalize pre-primary education.
- **0 Class Initiative:** Recognising resource constraints, the plan shifted from a two-year pre-primary program to a single year of pre-primary education (0 class) for children aged 4–6. This became the most widely available preschool option, boosting enrolment even in rural areas.
- **Accelerated School Readiness (ASR) Program:** A 150-hour summer program for children entering Grade 1 without attending 0 class was piloted in Benishangul Gumuz. It required no additional infrastructure, used low-cost materials, and was scaled up nationally in 2017.
- **Emergency Contexts:** The ASR program was extended to refugee and host communities in regions like Afar to prepare children for primary school.

These interventions prioritized cost-effective strategies to expand access while addressing resource limitations.

Integrated service systems

Effective universal ECCE services require integration with other services for children and families. Studies have found that integrated ECCE services lead to better quality by providing a continuum in learning, health and social services and have shown higher attendance and development outcomes. This typically means having ECCE services administered under one ministry or national agency, with responsibility for sector planning, funding oversight and policy implementation. These cross-sectoral ministerial structures help create greater alignment and efficiency in the achievement of ECCE goals (e.g. through shared funding commitments) and improved accountability (e.g. through shared reporting). Strong coordination between institutions also ensures better quality of services that support broader child development including health, nutrition and other interventions.

Currently, only half of OECD countries have implemented an integrated ECCE system. Even when ECCE is included into the larger education system, it often falls outside the primary school system which can create parallel arrangements for functions such as workforce development, school leadership and management (UNESCO, 2019). Increased efforts to achieve integration are a priority emerging from this review, especially given the evidence that combined health and education approaches have positive child outcomes, particularly in lower-middle income countries and poorer households. This is addressed below in relation to interventionist and preventative policies for these communities.

Interventions that are designed to promote collaboration amongst key stakeholders focus heavily on shared responsibility and coordinated efforts among families, educators, communities, and policymakers to promote children's learning and well-being. The review found that integrated programming of ECCE services often provides a legislated framework for collaboration across multiple sectors to improve ECCE uptake and development outcomes. In low-income settings, the multiple benefits of health and education interventions, as part of a broader poverty alleviation strategy, can help drive demand for ECCE through greater engagement of parents with other services.

The case box below describes integrated ECCE in Malawi with strong intersectoral collaboration:

BOX 3. COORDINATED EFFORTS FOR EARLY CHILDHOOD DEVELOPMENT IN MALAWI (World Bank, 2015)

Malawi's ECCE system is guided by the National Policy on Early Childhood Development (2006) and the National Strategic Plan (2009–2014), implemented by the Ministry of Gender, Children, Disability, and Social Welfare. Free pre-primary education is provided for children aged 3–5 at public childcare centers, alongside essential health services such as immunizations, antenatal care, and treatment for common illnesses. Child protection laws include the Disability Act (2012) and mandatory birth registration, though compliance is weak. Attendance at childcare centers is voluntary, with only 38% of ECD-aged children enrolled. Teachers receive 13 days of introductory training. Despite strong intersectoral coordination, challenges remain in implementation.

The Malawi addresses gaps in ECCE implementation through several strategies:

- **Intersectoral Coordination:** The Ministry of Gender, Children, Disability, and Social Welfare oversees ECD policies across sectors, ensuring collaboration between health, education, and nutrition interventions.
- **Community-Based Childcare Centers (CBCCs):** Malawi has established over 8,000 CBCCs to provide free pre-primary education, reaching more than 1 million children aged 3–5. While attendance is voluntary, these centers aim to expand access to early learning opportunities.
- **Teacher Training:** Teachers undergo 13 days of introductory training, covering ECD-related topics, including special needs education, to improve service quality.
- **Nutrition and Health Policies:** National policies promote exclusive breastfeeding, iodized salt consumption, deworming, and growth monitoring to address malnutrition. Free essential health services, such as immunizations and antenatal care, are provided at public facilities.
- **Strategic Plans and Guidelines:** Comprehensive plans like the National Strategic Plan for Early Childhood Development (2009–2014) guide implementation, though challenges remain in data collection and equitable service distribution.
- **Focus on Equity:** Efforts are made to ensure services reach disadvantaged groups, though compliance with quality standards and enforcement of policies like birth registration need improvement.

These measures aim to strengthen ECCE services, but further improvements in data collection, quality assurance, and equitable access are needed.

The remaining key challenges for Malawi include:

- **Low Enrolment Rates:** Only 38% of ECD-aged children attend community-based childcare centers (CBCCs), leaving a significant portion of children without access to early learning opportunities.
- **Voluntary Attendance:** Pre-primary education is free but not compulsory, which limits universal participation.
- **Weak Policy Enforcement:** Laws such as mandatory birth registration and iron fortification of cereals are not effectively enforced.
- **Compliance with Quality Standards:** While quality standards have been developed, compliance remains insufficient.

Teacher quality

Research from the US and OECD countries demonstrates that highly effective ECCE programs feature highly qualified teachers and small group sizes. Better educated staff, equipped with specialist training are more likely to support children's cognitive development through targeted lesson plans that meet individual child needs (NIEER, 2004). It is recommended that a benchmark of at least 50% staff in public ECCE centres have a minimum of three years, tertiary or post-secondary training with certification in ECCE or an equivalent field. A bachelor's degree is a minimum qualification for pre-primary teaching in most OECD countries, with 27 out of 37

countries requiring ECCE teachers to earn at least a bachelor's degree or equivalent (OECD, 2017). However, qualifications alone do not affect outcomes, but the ability of teachers and staff to create pedagogic environments to facilitate learning. In a review of over 200 primary education interventions across 52 low and lower-middle-income countries, the authors identified targeted teaching and structured lessons with teacher coaching were the most cost effective in increasing attendance and improving learning per dollar spent (Angrist et al., 2023).

There is wide variation in the training requirements across OECD countries, in terms of duration and pedagogical practices offered in initial teacher training programs. This results in disparities in the quality of ECCE systems. In LMICs, entry and training requirements for ECCE teachers are often the lowest in education systems. Less than half of ECCE teachers in low-income countries have at least the minimum pre- and in-service training required by their country to teach at the ECCE level, compared with 72% of teachers at the primary level (Bendini & Devercelli, 2022). In Indonesia, evidence has shown that hiring teachers with more training and experience is not sufficient to improve ECCE outcomes. In the Pacific, the lack of high-quality ECCE teachers makes recruiting and maintaining an ECCE workforce difficult (UNICEF, 2015). In order to attract high-calibre candidates to the profession, countries need to offer adequate pay. This reflects the value society places on teachers but also provides opportunities for teachers to have autonomy in their teaching practice and take an active role in the school improvement agenda (OECD, 2017).

Teacher training and professional development programs emerged as a widely studied area across all regions. While studies from high-income contexts frequently examined sophisticated professional development approaches (mentoring, reflective practice), evaluations in low- and middle-income countries often involved shorter-term training programmes for paraprofessionals or community volunteers. Both types of intervention typically reported improvements in educator practice and child outcomes, though the strength of these impacts varied significantly according to training duration, intensity, and contextual factors.

Teacher-focused interventions have also received considerable attention, particularly those aimed at improving motivation and reducing absenteeism. Studies (see for example: Arbour et al., 2016; Mbiti, 2016) found that teacher incentives and monitoring can improve teacher attendance, but the evidence on student learning outcomes remains mixed. Similarly, reviews on contract teachers (Kingdon et al., 2013) suggest that local hiring on fixed-term contracts may lead to better outcomes than reliance on permanent teachers, particularly in under-resourced environments.

The review has highlighted several notable examples of policy reforms designed to foster improved quality. In East Asia, China is actively investing in ECCE improvements but continues to face regional disparities in service standards, infrastructure, and staff capacity (Rao et al., 2023; Kidwai & Chen, 2016). Meanwhile, in Latin America, a professional development program responded to evidence that Chile's preschool environments often lack the pedagogical quality and learning resources needed to address developmental disadvantages faced by low-income children (Arbour et al., 2016).

The case box below describes the Chilean program and its impact on quality of practice:

BOX 4. A QUALITY-FOCUSED INTERVENTION IN CHILE (Arbour, et al., 2016)

Since 2007, the government of Chile prioritized early childhood development to address achievement gaps and economic inequality. It created the "Chile Grows with You" system and expanded free early education for the poorest 40%, increasing coverage for 4-year-olds from 35% in 2003 to 80% in 2012. Despite access gains, concerns about preschool quality led to the "Un Buen Comienzo" program, a two-year professional development initiative for preschool and kindergarten teachers and aides. The program improved classroom quality but had no measurable impact on children's language and literacy skills (Arbour, et al., 2016). It focused on quality improvement, which could enhance engagement and attendance.

The UBC program addressed the overall ECCE challenges as follows:

- **Preschool Quality Concerns:** UBC implemented a two-year intensive professional development program for preschool and kindergarten teachers and aides. This included 12 monthly workshops and 24 bi-weekly in-classroom coaching sessions, which significantly improved classroom quality.
- **Language and Literacy Outcomes:** Although the program showed null effects on targeted child language and literacy skills, the focus on improving teaching practices and classroom environments aimed to create a foundation for better educational outcomes over time.
- **Attendance Issues:** By enhancing the quality of preschool education, UBC indirectly aimed to improve engagement and attendance, as better classroom environments are expected to attract and retain students.
- **Accountability and Incentives:** UBC's cluster-randomized trial design ensured rigorous evaluation of its impacts, reducing the risk of over-reporting or misallocation of resources tied to attendance incentives.

Service quality

Interventions to improve quality may also focus on the quality and capacity of ECCE institutions at the whole-of-service level. These interventions may address many aspects of service quality, including constructing new facilities, improving sanitation and safety, supplying educational materials, or adopting child-centred pedagogical models. Quality improvements at the centre level are particularly influential in shaping children's experiences of belonging and engagement and in encouraging parents to enrol and retain their children in programmes. High-quality centres can also have a demonstration effect, spurring demand in communities where participation has historically been low.

This review did not identify specific examples of centre-level quality interventions, although it notes that these are likely to be part of any institutional policy aimed at expansion of ECCE provision towards universal access. Indeed, investment in ongoing quality upkeep and improvement is an essential component of government investment in universal systems, to ensure that disparities in quality do not arise which in turn exacerbate disparities in children's and families' experiences and outcomes.

3.2. Interventionist policies and programs

Interventionist policies and programs provide targeted support to make ECCE environments more conducive to participation and development for specific groups of children and families. This type of policy intersects in many ways with preventative policies that address factors that may constrain children's and families' participation in ECCE before they reach the point of enrolment. For example, nutritional support, early stimulation materials, or structured play-based curricula can improve both children's readiness to attend and their experiences while enrolled. For the purposes of this review, interventionist policies are defined as those that occur after the child is enrolled in ECCE, to make the services that they access more responsive to their specific learning and development needs.

3.2.1. Contextual challenges

The following contextual challenges drive the development of interventionist ECCE policies:

Inclusivity. Interventions that are inclusive utilise strategies to ensure equitable access to quality ECCE services for all children, especially those from marginalised or underserved communities such as children from refugee and ultra-poor backgrounds. Such initiatives aim to remove structural and social barriers, making ECCE services accessible, culturally responsive and inclusive for every child, regardless of background. When inclusive policies and programs are targeted and responsive to the needs of disadvantaged groups, participation gaps can be narrowed.

The review suggests that inclusivity must be considered in broader terms than is typical in current ECCE policy. For example, an examination as to whether ECCE services are inclusive of individuals affected by health inequities or chronic conditions that limit access is still needed. These considerations are often overlooked but can be pivotal in determining policy reach and equity.

Absenteeism can contribute to disparities in child outcomes, even when enrolment in ECCE is near universal. As an example, Gilley et al.'s (2015) Australian study of attendance patterns in ECCE in the two years before formal schooling found that many children, particularly those from disadvantaged backgrounds, were less likely to access the full 600 hours/year entitlement compared to their more advantaged peers. Similar findings were noted in Harrison et al.'s (2024) study.

High absenteeism rates in early childhood programs can occur due to health issues, family mobility, or lack of motivation, and can significantly reduce the impact of interventions. Attendance inconsistencies undermine continuity in learning, disrupt social development, and complicate program evaluations. For example, a study conducted in Chile shows that the preschool intervention had positive effects on language and literacy outcomes, but only for children with the lowest likelihood of absenteeism, indicating that children who attended regularly benefited significantly more than those who were frequently absent (Arbour et al., 2016).

Absenteeism also signals deeper systemic issues, including poor service quality or cultural misalignment, which require responsive and localised solutions. For example, Camaione & Muchabaiwa (2021) identified systemic issues such as underfunding, weak governance, and poor service quality as key drivers of low attendance in ECCE sectors across Eastern and Southern Africa and suggested that these challenges are compounded by data gaps, ineffective planning, and socioeconomic barriers, collectively hindering access and participation in ECCE programs.

3.2.2. Policy solutions

The following potential solutions emerged from this review to guide interventionist ECCE policies:

Inclusive ECCE programs

Inclusive ECCE programs involve differentiation of experiences to reflect the diverse strengths and learning opportunities of the children who are participating. Inclusive practices support all children to participate in the program and benefit from it to the fullest possible extent, including children with disabilities or developmental delay, from diverse socio-economic backgrounds and from culturally and linguistically diverse families, including indigenous and migrant families. In high-income countries, such as Australia, Canada and New Zealand, the integration of indigenous languages and introduction of mobile learning centres have improved the enrolment of indigenous, Maori and Pasifika children and their academic outcomes (Omoeva, 2017; Hoq et al., 2025).

Inclusive programs also provide developmentally appropriate experiences for the age and ability range of the children attending. For example, initiatives that provide stimulating educational materials and activities for younger children (often combined with parent training) have improved children's developmental scores and school preparedness (Yousafzai et al., 2016). Play-based curricula (such as instances where learning is guided through play and interactive activities) in preschool settings are associated with improvements in both academic and social-emotional skills, thus helping children enter formal schooling more ready to learn

(Bierman et al., 2008; Taylor & Boyer, 2020). These interventions may also enhance concentration, physical health, or emotional engagement, thereby contributing to improved attendance and developmental progress (Soper, 2023).

Health interventions and school feeding programs

Inclusive ECCE policies must reach beyond education outcomes alone, and need to integrate health, nutrition, hygiene, and safety to ensure that all children, especially those from marginalised communities, can thrive. Numerous studies investigated nutrition interventions, including micronutrient supplementation, fortified meals and feeding programs embedded within ECCE services, particularly prominent in Sub-Saharan Africa and South Asia. These interventions are typically aimed at increasing regular attendance and enhancing developmental outcomes, particularly physical growth and cognitive development. A smaller set of reviews addresses interventions targeting nutrition and health, such as school feeding and de-worming programs.

Kristjansson et al. (2007), Petrosino et al. (2012), Gelli et al. (2016) and Angrist et al. (2023) found these interventions to have positive effects on attendance and outcomes, although the quality and consistency of the evidence varies. For child outcomes, there is evidence that young children who receive nutritional support (such as meal programs or supplements) show better cognitive development and school readiness outcomes (Bhatta et al., 2020; Hong & Henly, 2020). At the same time, these holistic supports cannot replace educational support. Multiple reviews suggest that health interventions alone do not have a high impact on learning without targeted education inputs.

Evidence of the impact of these interventions on participation is almost mixed. Taylor-Robinson et al. (2015) found only modest effects of de-worming interventions on attendance and no consistent effect on learning outcomes. Another example is that of the Philippines, where access and participation is limited despite the availability of school feeding programs (Ulep et al, 2024). This further confirms that targeted health and nutritional interventions are one component of a complex ecosystem of supports.

Targeted service provision

Service delivery that focuses explicitly on the unique needs of children and families from marginalised communities, potentially within a broader universal implementation policy, are valuable in prompting equitable participation, both in ECCE and within labour markets for parents (particularly mothers). These policies go beyond the expansion of ECCE services to hard-to-reach areas and consider the specific additional needs of the children and families that they are serving, often in consultation with community members. The establishment of community-based pre-schools, particularly in underserved areas, has been well documented as having a positive impact on children's attendance. A systematic review conducted in low – and middle -income countries found that the provision of ECCE in rural villages saw an increase in enrolment by up to 60% (Snilstveit et al., 2016).

The case box below describes targeted ECCE provision in Indonesia for disadvantaged districts:

BOX 5. IMPROVING SCHOOL READINESS IN THE DISADVANTAGED DISTRICTS OF INDONESIA (Brinkman, et al., 2017)

The Indonesia Early Childhood Education and Development project aimed to improve school readiness by providing interventions to 3,000 villages in 50 districts. It included community facilitators raising awareness about child development, block grants of \$18,000 for establishing or strengthening preschool services, and 200 hours of teacher training. Most communities (79%) established new playgroups for children aged 3–6. The program cost \$30 per child annually and increased enrolment, benefiting disadvantaged children. Impacts were sustained over three years, demonstrating modest but positive effects on child development.

The main challenges faced by the Indonesia Early Childhood Education and Development project and how the project mitigated these are described below, Programa Urbano addressed some of the challenges as follows:

- **Substitution Effect:** Some substitution occurred away from existing preschool services, which may have impacted the overall effectiveness of the intervention. The project provided block grants to communities and enabled them to establish new preschool services or strengthen existing ones. This flexibility allowed communities to adapt to local needs, mitigating the impact of substitution from existing services.
- **Disadvantaged Backgrounds:** Ensuring sustained benefits for children from disadvantaged backgrounds required targeted efforts. Through the community facilitators the project raised awareness about the importance of child development, ensuring that disadvantaged families understood the benefits of early childhood education.
- **Sustainability:** Maintaining impacts over time, as observed in follow-up evaluations three years later, posed challenges. The project included teacher training (200 hours) to improve the quality of education, ensuring long-term benefits for children.
- **Cost Management:** Balancing the low-cost nature of the program (\$30 per child annually) with the need for quality and accessibility. This was done by using a community-based approach and block grants. Therefore, the program maintained low costs while expanding access and improving quality.

3.3. Preventative policies and programs

Preventative policies and programs address the barriers that can exclude marginalised children and families from engaging with ECCE at all. The evidence suggests that children who stand to benefit the most from ECCE participation are the most likely to miss out due to inequalities that compound from birth. Barriers to access are not just financial; they include geographic isolation, lack of infrastructure, cultural constraints, and health inequities that can significantly hinder participation, especially in low- and middle-income countries. While gender disparities are not as high in ECCE compared to the school sector, deeply entrenched gender stereotypes also remain a barrier to girls' enrolment in pre-school.

3.3.1. Contextual challenges

The following contextual challenges drive the development of preventative ECCE policies:

Economic inequality and access. Despite expanded access to ECCE over the last decade, many studies have identified ongoing barriers to participation for certain sub-populations. Within countries, socioeconomic factors are the strongest predictors of pre-primary attendance. In low-income countries, children from the poorest quintile are 8 times less likely to attend pre-school than their peers from the richest quintile (UNICEF, 2019). In East Asia, China grapples with pronounced urban-rural divides in ECCE coverage, further exacerbated by

migration and income disparities (Rao et al., 2023). Latin America presents similar trends: in Chile, low-income families often access under-resourced preschools that fail to address developmental gaps (Arbour et al., 2016). The same pattern is observed in middle and high-income countries, where the poorest children are 4 times less likely to attend pre-school (UNICEF, 2019). This is compounded by factors relating to culture, ethnicity, disability and gender. For example, studies in Germany reported that children from immigrant families were less likely to attend pre-school (Cornelissen et al., 2019) due to a lack of parental awareness and financial barriers. A report by the International Development Research Centre (2024) notes that children in rural and conflict-affected settings remain the hardest to reach.

Deep-rooted economic disparities between countries also limit ECCE access, especially in low-income and fragile contexts (Behbehani et al, 2024; Palik & Østby, 2023). Burkina Faso and Yemen report some of the lowest pre-primary enrolment rates globally, reflecting both systemic neglect and socioeconomic instability (Devercelli et al., 2016). Countries like Kosovo and Malawi illustrate how economic barriers intersect with geographic and demographic inequalities, leaving vulnerable populations underserved (Saqipi et al., 2021; World Bank, 2015).

Cultural and social norms. Cultural beliefs and social norms play a defining role in shaping family engagement with ECCE programs. Globally, attitudes toward early learning, parenting roles, and institutional trust directly influence child outcomes and policy uptake. Social expectations, childcare roles and women’s employment opportunities can all influence ECCE participation and quality. All actors involved in designing and delivering ECCE systems must balance the strengths of families’ care and responsibility for their children with the benefits of participation in formal ECCE system.

While institutional policies must be designed around families’ expectations and preferences for ECCE (see Nordic example above), preventative ECCE policies and programs can also engage sensitively with social norms that may inhibit ECCE participation. In some contexts, such as Europe, social norms have been established around young children’s participation in ECCE, which drives enrolment. In others, the caring of young children is seen as a family responsibility and therefore, ECCE uptake is lower. In these contexts, engaging families in ECCE can provide reassurance that ECCE works in partnership with – not as a replacement for – familial education and care, and help families see the benefits it provides.

3.3.2. Policy solutions

The following potential solutions emerged from this review to guide preventative ECCE policies:

Fee relief and cash transfer programs

Most studies included in the review examined the use of financial support to families, such as fee subsidies, scholarship or cash transfers, to address the equity gap. Public funding combined with targeted financial support has been shown to be most effective in reaching marginalised children. Incentive schemes (such as income-indexed fees, tax relief and cash bonuses) in France, Germany and Norway have lifted enrolment among low-income and immigrant families (Engel et al, 2015; Eurochild, 2021; UK Government, 2023). However, it has been observed that in very low-income families, fee incentive schemes did not improve participation rates as they already benefit from low or zero fees – showing the importance of aligning targeted supports and universal system settings.

Other policy interventions through income supplementation (such as cash transfer programs) can be an effective form of subsidised support for ECEC participation. Research has shown that income supplementation can be most applicable in highly disadvantaged communities where poverty-related factors limit child development and where parents need encouragement to access support for early childhood development (Landivar et al, 2022; Jackson et al., 2019). Further, these interventions were found to be most effective when the subsidy is maximised and where the payments are conditional on support for children’s learning (Jackson et al., 2019).

Conditional cash transfer (CCT) programs have been examined in at least five systematic reviews (e.g., Baird et al., 2013; Little et al., 2021; Petrosino et al., 2012; Zimmerman et al, 2021), with three including meta-analyses. These reviews consistently demonstrate positive effects of CCTs on enrolment and attendance, though their effect on learning outcomes is weak or inconclusive. Similarly, the effects of unconditional cash transfers

(UCTs) have been evaluated, with some studies (e.g., Sauval, 2024 et al; Yoong et al., 2012) suggesting positive effects only when transfers are directed to women. However, the evidence base for learning-related outcomes remains underdeveloped. Successful CCT and UCT programs are more effective when the cash transfers are reliable and sufficient to remove the barriers to attendance for low-income families.

Conditional and unconditional cash transfers targeted at caregivers to encourage preschool attendance feature especially prominently in Latin America and South Asia. Evidence from these regions generally indicated positive effects on enrolment and regular participation, with emerging evidence highlighting positive secondary effects on maternal labour force participation.

School voucher programs and targeted scholarships, another widely implemented intervention, show mixed evidence. While some reviews (e.g., Bouillon & Tejerina, 2007; Morgan et al., 2013) suggest increased access to private education for low-income students and better performance outcomes, others, including meta-analyses like Petrosino et al. (2012), report negligible or no effects. Likewise, reviews of interventions aimed at reducing the direct cost of schooling—through scholarships, fee waivers, or provision of uniforms—also offer divergent conclusions. For instance, while Morgan et al. (2013) found such interventions effective in increasing enrolment, Petrosino et al. (2012) found more selective results, with uniforms having an impact but fee removal showing limited effects.

Parent engagement in ECCE

Informational interventions include parental education campaigns designed to shift family behaviours by changing the opportunity cost of sending children to ECCE programmes, increasing awareness of their benefits, or enabling caregivers to reallocate time and resources. These interventions may also influence caregiver beliefs and aspirations, indirectly fostering a culture of early learning.

Stronger coordination between parents and ECCE ensures what children learn is reinforced at home, and vice versa. It also builds trust and demand, where families are more willing to send children to a centre where they are more involved and informed. In both high-income and lower middle-income countries, parental outreach has led to greater uptake in ECCE (Bertram et al., 2016; Snilstveit et al., 2016). For example, in Singapore, parenting information campaigns about the long-term benefits of ECCE has led to a 99% enrolment rate. In rural India, mothers who received messaging about early childhood education were 8 percentage points more likely to send their child to an ECCE centre.

Policies and interventions that directly encourage greater parent involvement in ECCE have been examined in 11 reviews. Several reviews looked at the use of information campaigns to build parental awareness of the value of early education, which in turn has increased demand for ECCE services. In Indonesia, government and non-government organisations collaborate to run parent education programs across the country. The Ministry of Education and Culture provides competitive grants to preschools for delivering parenting programs, which require parents to bring their children and interact with them during the sessions (Bendini & Devercelli, 2022).

The impact of parenting education programs on pre-school attendance has been examined through several correlational studies. In Bangladesh (Aboud, 2007) and Bhutan (Chan et al., 2021) integrated parenting support programs showed a boost in attendance, with reports as high as 90% in Bhutan. Other parent focused interventions, including home visits and attendance monitoring, are also effective in increasing ECCE participation. Attendance monitoring and targeted follow-up with parents have been the focus of several randomised control trials, mostly in the United States (e.g. Rogers and Feller, 2018; Canfield et al., 2023; Erlich et al., 2018). They found an overall increase in attendance rates and a 10-36% drop in absenteeism, with the greatest difference observed in low income and single-parent families. Similar findings were reported in Chile (Arbour et al., 2023; Mashburn et al., 2006; UNESCO, 2024) and Bangladesh (Ulep, et al., 2024) with attendance rates increasing by 10% and 20%, respectively.

‘Stacked’ household support

At the household level, integrated interventions can reduce barriers to participation by addressing both economic and informational constraints. The ‘stacking’ of parenting and other community-based programs has been found to have a positive effect on children’s development outcomes, particularly for vulnerable and disadvantaged populations. For example, by combining a parental education intervention with a cash transfer program can have an additive effect due to increased household income and better awareness about child development (Fernald et al., 2017).

BOX 6. A TARGETED PROGRAM FOR URBAN POOR CHILDREN IN NICARAGUA (Hojman, et al., 2022)

The Programa Urbano in Nicaragua aimed to improve childcare availability and quality for children aged 0–4 in poor urban areas. It established Centros Infantiles Comunitarios (CICOs) with structured curricula focused on cognitive, language, and socio-emotional development. Educators were recruited locally, trained, and supported with coaching. The program provided meals, micronutrients, family support services, and parenting workshops. It showed significant positive impacts on children's socio-emotional skills (0.38 SD) and a 12-percentage-point increase in maternal employment, making it highly cost-effective at \$147 per child for two years. Despite its success, scaling challenges remain.

Programa Urbano addressed some of the challenges as follows:

- **Scaling Issues:** The program targeted urban families living in extreme poverty and used a community-based approach by recruiting educators locally, which helped ensure scalability within resource-constrained settings.
- **Educator Participation:** Educators received initial training from the Ministry of Family and were offered coaching sessions, with 50% participation. This coaching aimed to improve teaching quality and engagement despite limited participation.
- **Resource Constraints:** The program maintained low costs (\$147 per child for two years) by providing modest stipends to educators and leveraging community resources, ensuring affordability while delivering essential services.
- **Community Engagement:** Parenting workshops, family support services, and home visits were provided to involve families and strengthen their connection to the program.
- **Operational Sustainability:** The program's cost-effectiveness was demonstrated by its impact on maternal employment, which alone could offset program costs, ensuring financial sustainability.

In Africa, poverty alleviation programs which focus on improving health, nutrition and parent education have shown improvements in children's learning and development through the provision of learning resources and more stimulating parent-child interactions (Seidenfeld et al., 2015, Handa et al, 2016). Other integrated programs in South America, which provide health check-ups and supplementary feeding attracts higher enrolments because parents recognise the value of education and the health benefits for their children (Angrist et al., 2023).

The case box below shows how parent engagement in ECCE was stacked with health interventions in Nicaragua, resulting in improved child development as well as maternal employment outcomes:

3.4. Compensatory policies and programs

For the purposes of this report, compensatory policies and programs are those that provide other forms of support, such as informal early learning, to children and families who miss out on engagement with ECCE services, off-setting the effects of socio-economic disadvantage that limit participation. The distinction between formal and informal programs is not always clear, as many institutional or targeted ECCE programs (such as playgroups) occur in non-formal settings. In this review, an informal program may be seen as compensatory when it occurs in a context where a more formal ECCE option exists, but which is not available to children either temporarily or permanently.

3.4.1. Contextual challenges

The following contextual challenges drive the development of compensatory ECCE policies:

Long-term exclusion. Compensatory policies or programs may be deployed where entrenched social and economic disadvantage precludes participation in formal ECCE. This may be the case in countries facing significant constraints on their ability to provide a universally accessible ECCE system, or in communities facing participation barriers that cannot be overcome through targeted supports.

Temporary disruption. Children and families may also require compensatory programs when events disrupt their access to ECCE. Ezaki (2022) reports that the establishment of temporary learning centres to accommodate children after school buildings were destroyed in the earthquake allowed the restoration of a sense of normality in Nepal. Internally displaced children and children in fragile and conflict-affected settings are difficult to reach through formal education systems and often miss out on ECCE provisions (GPE KIX, 2023). For example, Colombia faces the compounded challenge of integrating migrant children during humanitarian crises, where cultural adaptation and social inclusion become critical to effective service delivery (Valenzuela et al., 2023). Compensatory programs can provide continuity of learning through periods of disruption and build resilience in children through play-based, trauma-informed practice.

3.4.2. Policy solutions

The following potential solutions emerged from this review to guide compensatory ECCE policies:

Parent education

In every country, families are children's first educators, and empowering families can play a valuable compensatory – as well as complementary – role in ECCE systems. This review found many programs aimed at building parents' capacity to support early learning for their children in the home, either as a stand-alone initiative or in parallel with increased engagement in formal ECCE settings. Parenting education programs delivered through home-visitation or community groups were frequently evaluated in Africa, Asia, and Latin America, demonstrating mixed but generally positive impacts on socio-emotional and cognitive outcomes for children.

Non-formal settings

Non-formal ECCE programs often support marginalised groups and play a vital role in lifelong learning, especially in regions where formal education systems are underdeveloped or inaccessible. The nature of these programs can vary widely, from *ad hoc* family and community delivery through to paraprofessional service delivery in homes or public spaces. Like formal ECCE, participation in non-formal ECCE settings can also be subject to access and equity challenges. For example, in the Pacific Island Countries, non-formal ECCE settings (such as, district-level playgroups and informal centres) face uneven access, especially in remote areas, where participation is affected by teacher availability, community engagement, and resource constraints (Vindrola, Ghawi & Li, 2024).

Non-formal settings also face particular challenges in demonstrating impact on child outcomes towards SDG4. While some efforts have been made by governments to introduce flexible scheduling to accommodate children affected by seasonal/migratory settings (ARNEC 2019; Save the Children 2017), these are not fully integrated into education monitoring frameworks. For example, in Indonesia where government-sponsored, community-based playgroups were introduced in rural Indonesia to expand access to ECCE, learning monitoring was limited by short exposure durations and data gaps were widespread (Brinkman et al., 2017a; 2017b). Further work is required to ensure that the impact of such programs is recognised so they can be viewed through a strengths-based – not deficit – lens.

The case box below shows how the creation of play spaces along migration routes in Colombia helped to ensure that migrant children had access to quality ECCE experiences outside formal settings:

BOX 7. PLAY-BASED LEARNING FOR VENEZUELAN MIGRANT CHILDREN IN COLOMBIA (Valenzuela et al., 2023)

This policy initiative in Colombia: "Jugar para Soñar" (Play to Dream) was developed by the International Rescue Committee (IRC) and partners, in co-ordination with the Colombian government, to support Venezuelan migrant children and families during the COVID-19 pandemic. It is a play-based program that includes:

- Creation of safe play and learning spaces along migration routes.
- Distribution of traveling backpacks filled with educational and play materials.
- Training of early childhood educators in trauma-informed and culturally sensitive pedagogy.
- Alignment with Colombia's broader early childhood policy frameworks, though with noted gaps in integration.

The initiative tried to address the specific educational needs of the migrant communities, but some challenges remained, as follows:

1. Adaptation to Migrant Needs:

- Materials and services had to be adapted for highly mobile families, which proved difficult.
- Understanding how families used the backpack materials was a challenge.

2. Coordination and Implementation:

- Collaboration among multiple actors (government, NGOs, educators) was complex.
- Changes in practice and lack of shared knowledge about play-based learning created friction.

3. Sustainability and Scalability:

- Ensuring long-term impact and expanding the program amid shifting migration patterns was challenging.

4. Geographic trends

This review identified the ways in which ECCE participation and retention is supported, increased, and sustained, and which practices are more prevalent globally. The process also provided valuable insights into understanding ways that international governments attract, support, and retain families in ECCE settings, which can also include underrepresented or marginalised groups. In terms of the geographical distribution of the 84 included texts with the policy interventions, please see the table below:

- The **Global North** (North America, Europe) is well represented with studies from the US, Canada, England, Sweden, Finland, which often highlight research into established ECCE systems or reforms (universal programs, long-term outcomes).
- The **Global South** contributions (Chile, Indonesia, Bhutan, multi-LMIC review) highlight emerging ECCE initiatives in developing contexts: these often focus on access expansion and basic attendance/health, reflecting different priorities (e.g., encouraging children and families to attend as opposed to refinement of quality).
- **Cross-country analyses** (e.g. Bhutoria et al., 2025; Richter et al., 2017) provide a global perspective and allow generalisation across regions for certain effects (e.g., parenting and preschool effects seem consistent across very diverse nations in that study).

This distribution shows that **increasing participation in ECCE is a worldwide commitment**, albeit with regional nuances:

- High-income countries wrestle with the *quality of and equitable access to ECCE* (not just access, which is near universal).
- Middle-income countries focus on *scaling access while maintaining quality* (Chile, for example, is dealing with absenteeism and program effectiveness).
- Lower-income countries prioritise *basic access and integrating childcare with health/nutrition* (as in the systematic review findings, or Indonesia's creation of community preschools).

Regional trends

- Nordic Countries (Finland & Sweden) - Universal, state-funded ECCE has increased demand and improved service quality, with mixed public-private provision ensuring flexibility and efficiency (e.g. Alexiadou et al., 2022).
- East Asia (China)- Significant preschool expansion has improved enrolment (e.g. Rao et al., 2023), but urban-rural disparities and uneven policy enforcement continue to hinder universal outcomes (e.g. Chi, 2018).
- Latin America (Chile & Colombia)- Chile's ECCE classroom reforms can be impacted by student absenteeism (e.g. Arbour et al., 2016), while Colombia's play-based "Jugar para Soñar" program demonstrates the power of inclusive design and public-private collaboration during crisis (e.g. Valenzuela et al., 2023).
- South Asia and Sub-Saharan Africa – Low-cost community playgroups (e.g. Dawes et al, 2023), non-formal, alternative models of preschool delivery show to be promising interventions despite scarce, reliable data. However, the ECCE sector remains underfunded in Southeast Asia.
- Pacific (Australia, Aotearoa New Zealand, Pacific Island States)- Expansion of ECCE means many reforms are focused on equity and quality. Although studies are limited, research suggests that ECCE participation can improve outcomes of Maori and Pasifika children (CPAG, Neuwelt-Kearns & Ritchie,2020).

Table 7. Geo-distribution of the reviewed documents

Countries	Count of interventions
Australia	6
Azerbaijan	1
Bangladesh	1
Bhutan	1
Brazil	1
Cambodia	1
Canada	2
Chile	3
China	5
East Asia	1
Ethiopia	3
Europe	1
Finland*	1
Germany	4
Ghana	1
Global	17
India	1
Indonesia	3
Kosovo	1
Macedonia	1
Mexico	2
Nepal	1
Netherlands	1
New Zealand	1
Nicaragua	3
Norway	2
Pacific	1
Philippines	1
Romania	1



Countries	Count of interventions
Rwanda	2
South Africa	2
Sweden*	1
Turkey	1
United Kingdom	1
Uruguay	1
USA	7
Zambia	2
36 countries/regions	84

Given the large volume of data available, the list above is not exhaustive and requires further investigation. Accordingly, those policy interventions that were identified as particularly promising, based on reach, evidence of effectiveness, and/or prospect for scalability and adaptation beyond the context of original implementation are presented in Annex 2 and discussed in the following section.

5. Priorities across all policy types

Although this review has focused on specific examples of policy interventions that have contributed to improved participation and outcomes in ECCE, the research has also highlighted several recurring priorities that are relevant to all policy types and appear in the literature related to numerous regions and countries. These priorities can impact the successful implementation and sustainability of all types of ECCE interventions, and are recommended as components of all ECCE policy solutions.

5.1. Wellbeing and safeguarding

For any type of intervention involving young children, a safe physical environment with child-proofed facilities, safe play equipment, and sanitation, is critical for ensuring children's wellbeing and safety (Mwoma, Begi, & Murungi, 2018). High-quality preschools strive to maintain not only on physical safety but also an emotionally safe climate which involves teaching children about personal safety in age-appropriate ways, fostering trusting relationships so children feel comfortable reporting problems, and actively involving parents and the community in these safeguarding efforts, since these are necessary prerequisites for positive early development (Daelmans et al., 2015).

5.2. Holistic learning and development

Effective ECCE interventions go beyond academic outcomes (such as literacy and numeracy) and recognise the holistic nature of early learning. In particular, recent research suggest that interventions for social-emotional learning that recognise skills like emotional regulation, empathy, and cooperation are foundational for children's success in school and life and can lead to significant improvements in children's social-emotional skills and behaviour, including better emotion regulation and social competence, as well as reductions in challenging behaviours (Murano, Sawyer, & Lipnevich, 2020; Stefan et al., 2022). There is also growing interest in executive function as a critical developmental outcome in early childhood, with particular benefits for mitigating the effects of poverty (Blair, 2018).

Legal frameworks and rights

Robust legal structures are vital for institutionalising the rights of children and families within ECCE systems (Alexiadou et al., 2022; Devercelli et al., 2016). East Asia's China, for example, lacks comprehensive laws governing early childhood education and job protection measures for mothers (Kidwai & Chen, 2016), limiting uptake and equity. In contrast, Europe's Romania boasts strong legal commitments to child development but faces significant hurdles in execution and enforcement (Adams, 2019). A disconnect between legislation and practice weakens policy credibility and reduces the scope of services delivered. For example, while there are legal frameworks for supporting children's rights and access to ECCE in Kosovo, the lack of a multisectoral strategy has led gaps in implementation (Saqipi et al., 2021). Therefore, despite a supportive legal and policy framework, many children do not fully benefit from early childhood services in Kosovo.

Cohesive governance, financing and implementation

The multi-sectoral nature of ECCE appears to contribute to complex and fragmented policy implementation. Globally, countries like Bulgaria, Burkina Faso, Indonesia, Jamaica, and Yemen face structural governance weaknesses and fragmented institutional frameworks, leading to poor policy coherence and accountability (Devercelli et al., 2016). Lack of cohesion can also lead to underfinancing of the many interdependent policy levers that influence access, quality improvements, and workforce development. In East Asia for example,

China's policy gaps include insufficient job protection for mothers, undermining parental involvement and gender equity in early learning (Chi, 2018).

Balanced central and decentralised leadership

Cohesive ECCE policy requires strong centralised system leadership and stewardship. In Europe, nations such as Finland and Sweden have experienced decentralisation shifts during economic crises, which diluted national oversight and disrupted consistent service delivery (Alexiadou et al., 2022). At the same time, ECCE interventions – especially integrated services – are unlikely to succeed without meaningful community participation in the management and accountability for resourcing. Therefore, devolution of ECCE services to the sub-national and community levels should consider a national approach to ECCE planning and coordination, legislation, financing, staffing and standards, to guide implementation at the local level. Robust accountability mechanisms are also important to ensure efficient allocation and use of ECCE resources, and the national government can play a key role in redistributing funding across administrative areas to reduce inequality.

Evidence and data

Interventions should draw upon evidence from trials or studies that evaluate their effectiveness and sustainability. Given that there are many available programs and practices that can be used to support young children, ensuring there is evidence of effectiveness is important for scalability and meaningful support. Evaluating implementation also requires a detailed understanding of systemic and contextual challenges. As this review has shown, there is considerable scope for enhancing data collection and analysis for ECCE interventions, especially collection of meaningful, systemic data on child outcomes.

Equity indicators

Interventions may work differently depending on a range of child and household characteristics., including gender, poverty level, disability status, rurality and linguistic or cultural identity. For example, a fee abolition policy may benefit boys and girls differently if social norms discourage girls' attendance. Similarly, infrastructure improvements may increase participation more substantially in rural areas where existing services are sparse. Recognising these potential differences is critical for interpreting heterogeneity in results and for ensuring that policy recommendations are inclusive.

Data collection and analysis must be robust and inclusive (Brinkman et al., 2017b). Aggregated data can hide significant disparities (Vindrola, Ghawi & Li, 2024). To uncover who truly benefits from policy interventions, it is important for data disaggregation to occur by income level, gender, geography, disability status, and other relevant factors impacting on ECCE participation (Eurochild and ISSA, 2021). It is also crucial to understand what types of women are entering the workforce, what cultural norms are affecting others, and how caregiving responsibilities limit opportunities. Without such analysis, it is challenging to identify and address the structural inequities that policies may inadvertently reinforce (Eurochild and ISSA, 2021; Borisova et al., 2019).

Community co-design and ongoing feedback

Interventions that are co-designed with young people, carers, and those with lived experience are often more easily accepted and have better engagement/participation rates. Household and community feedback mechanisms are also important to monitor the effectiveness of interventions including wider benefits and impact. For example, improved ECCE experiences can enhance caregivers' perceptions of value, leading to increased and sustained participation. At the same time, as caregivers—particularly women—gain access to employment or education through reduced childcare burdens, their increased income and autonomy can generate further investment in early learning. These feedback loops suggest that initial participation gains can lead to broader changes in household wellbeing and social norms, further reinforcing demand for quality early education.

6. Conclusion and recommendations

Bringing together the strands of evidence from this systematic review on the global experience of increasing ECCE participation, we highlight what has generally worked, what common gaps have emerged, and what recurring challenges need to be addressed across different contexts. Multiple reviews have attempted to synthesise the literature, providing insights into which policies work to improve access to ECCE and development outcomes in diverse settings. However, a closer examination of this body of work reveals significant limitations in scope, methodology, and coverage, which this review aims to address.

The preliminary review of literature found that systematic reviews tend to be fragmented, often focusing on narrow outcomes or specific intervention types. Few reviews systematically link intermediate outcomes like attendance or engagement with final outcomes such as learning, completion, or life outcomes. Moreover, most reviews rely heavily on quantitative data, with limited incorporation of implementation studies or contextual insights. Very few appear to provide insights into LMICs or comparative contexts. There is also a current lack of reviews focused on post-COVID participation in ECCE settings and the impact on attendance and transition to school due to learning disruptions. The use of digital learning in ECCE settings could be further explored, particularly as they relate to pedagogical approaches in early learning and development.

Overall, the literature reveals several gaps and inconsistencies. Methodological weaknesses are consistently observed, and there is a lack of longitudinal data on the implementation and sustainability of those policies that are considered impactful on participation and retention. Additionally, selective reporting of outcomes is prevalent in the data, particularly regarding developmental measures. Few studies systematically assessed intervention costs or provided robust cost-effectiveness analyses, limiting policymakers' ability to interpret results practically and comparatively. Additionally, there appears to be a lack of research studies that clearly link early childhood participation outcomes to implemented policy interventions.

The research presented in this report has identified several effective practices, ranging from broad policy responses that promote participation to more specific policy and targeted interventions for supporting marginalised children. Interestingly, despite a comprehensive screening, there remains disparate implementation and monitoring of policies globally in the region, warranting further investment and monitoring.

The research presented in this report also highlighted several key learnings:

- There is a **lack of causal evidence** linking institutional, interventionist, preventionist, and compensatory policies to increased rates of early childhood participation. That is not to say that such policies do not lead to these outcomes, it is simply challenging to establish causal pathways due to the presence of confounding factors (including the multi-sectoral nature of EC support, private and public sector differences, universal access etc).
- In many countries, a **lack of data on the most disadvantaged** children suggests that even where participation rates appear to have increased, there is little information as to the type of children who are participating, and the type of children who do not. While global data on participation and access is more readily available, it often masks underlying factors that contribute to regional disparities.
- There continues to be a **lack of agreement in the definition of early childhood participation**, with an overlap appearing in reviewed texts regarding attendance, engagement, and equitable access relevant to broader ECCE participation. This makes it challenging for setting targets and monitoring the effectiveness of ECCE policies.
- Policies that promote **universal access to ECCE have been the most successful** in expanding ECCE provision, particularly in low and lower-middle income countries. However, even in the most highly resourced contexts, the promise of ECCE programs to deliver equitable and quality access remains a challenge. Low quality ECCE programs can have negative impacts on children's learning and development, and the lowest quality programs tend to be those in the most disadvantaged neighbourhoods.

Overall, the research presented in this report suggests that investment in early childhood participation through targeted interventions such as changes in governance, funding and quality of educational provision, family

supports, early involvement and awareness building in addition to increasing access through low fee options or free universal ECCE can impact positively on participation.

Further, while there have been significant improvements in participation rates in early childhood settings globally, these gains are likely to be most beneficial for those already advantaged. Access to quality early childhood education and care also remains fragmented, with the findings of this review suggesting that although policy agendas designed to improve early childhood participation and retention have proliferated globally, disparities are pervasive, and equity gaps persist. This is particularly true for families impacted by socioeconomic difficulties or living in poverty, or when children experience discrimination based on disability, ethnicity, or linguistic background. These issues are complex and can only be addressed through a multi-sectoral approach that targets the unique needs of young children and their families and provides additional support to disadvantaged and marginalised groups. All initiatives require cooperation between partners at regional, national, and local levels and between those who work across all areas of the education system. It is therefore recommended that partners work together to:

Refine monitoring of participation

Ambiguity in how “early childhood participation” is defined and articulated in policy and programmatic agendas can hamper progress towards achieving Sustainable Development Goal 4. To sustain policy momentum, governments and institutions need clear, multidimensional metrics that capture not just enrolment, but equitable access, quality of experience, and continuity of participation. For instance, explicitly child-level participation and outcomes, program quality and contextual information to capture gender, disability, socioeconomic status, and regional differences. This is in alignment with the reform agendas of high-performing systems that recognise system effectiveness can only be quantified with all four components (attendance, quality, outcomes and context). When participation is framed through an equity and quality lens, stakeholders are better equipped to diagnose gaps, assess program impact, and ensure that reporting aligns with global commitments.

Identification of gaps across regions

Effective early childhood participation and retention policies must be inclusive across geographies and populations. Conducting gap analyses at national and sub-national levels highlights where early childhood services are underdeveloped, overlooked, or have regressed, and is still needed. This will support targeted investment in underserved regions, especially for marginalised or systemically excluded communities. Furthermore, identifying policy shortcomings, such as a lack of coordination across ministries or insufficient inter-agency collaboration, can inform future legislative reforms and strategic planning. A focus on equity is needed to ensure that participation policies do not inadvertently widen disparities but instead contribute to long-term learning and development outcomes.

Address quality vs. participation tensions

A recurring challenge is ensuring that efforts to expand access do not dilute the quality of early childhood programs. Policy frameworks must acknowledge this tension and proactively address it by setting minimum standards for teacher qualifications, curriculum, and child outcomes while scaling access. Monitoring systems can track how participation growth impacts service quality, allowing for timely interventions. Sustainability hinges on building models that do not sacrifice educational value for the sake of enrolment numbers, ensuring children receive meaningful and developmentally appropriate care and learning experiences.

Strengthen evidence-based approaches

To ensure that early childhood participation policies are effective and enduring, it's essential to base decisions on robust evidence and lessons drawn from previous implementations. Systematically gathering and analysing data from pilot programs, national initiatives, and community-led interventions can reveal what works and why. By building a shared repository of best practices, particularly those adapted to local contexts, policymakers can avoid reinventing the wheel and instead scale what's already been proven to work. These insights help refine policy design, tailor interventions to diverse populations, and track improvements over time, ensuring lasting impact.

Integrate safeguarding into ECCE contexts

Safeguarding is often under-emphasised in informal or community-led early childhood settings. For policies to be sustainable, educational settings must embed safeguarding standards. This includes training caregivers and



staff in child protection, designing safe environments, and ensuring that referral systems are in place for children at risk. Policies that integrate safeguarding holistically cultivate trust among families and communities, reinforcing participation and retention. Moreover, linking safeguarding to quality assurance mechanisms ensures accountability and long-term viability.

Deepen research on social costs and benefits

Understanding the broader social value of early childhood participation is key to justifying continued investment. Rigorous research, especially longitudinal studies, can assess how participation affects future academic performance, health outcomes, labour productivity, and social integration. Conversely, failing to provide access may result in higher social costs, including remedial education, healthcare burdens, and intergenerational cycles of poverty. Communicating these findings in cost-benefit terms can strengthen advocacy and inform budget allocations, helping policymakers prioritise funding in a fiscally responsible way.

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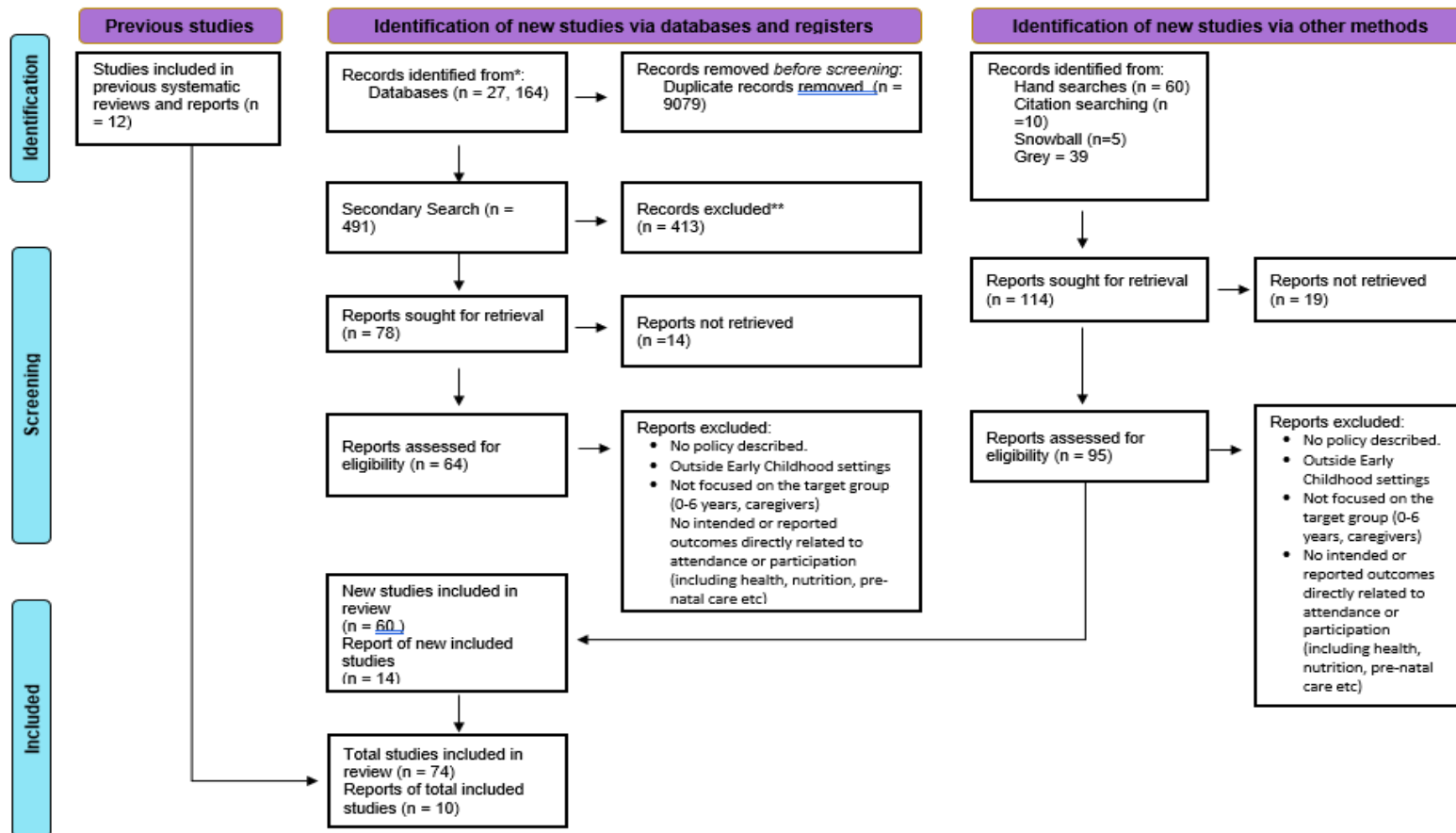
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APPENDICES

Appendix 1: Review methodology

PRISMA flow diagram showing the identification and selection of included sources from literature and other sources





Appendix 2: Featured interventions

Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
Acevedo et al.	Coordinated approaches	Preventative	Policy review	2018	2003-2018	Azerbaijan	Preschool enrolment in Azerbaijan remains low at 21%, with significant disparities between rural and urban areas. The findings underscore the need for stronger coordination across sectors and improved monitoring mechanisms to ensure equitable access and quality in early childhood services.	High
Adair et al.	Coordinated approaches	Interventionist	Systematic review (7 RCTs)	2015	2001 - 2015	Global	Interventions for children with disabilities: Individualised education plans & mentoring increase participation ($t(238)=2.02$, $p=0.0221$, $d=0.45$); group programs increase. Programs focusing only on motor skills (participation secondary) no effect on participation.	Moderate
Adams	Coordinated approaches	Preventative	Policy review	2019	2003-2019	Romania	Romania has achieved a high pre-primary enrolment rate of 90%, yet rural and Roma children remain underserved. Additionally, monitoring systems for children under the age of three are limited, highlighting the need for more inclusive and comprehensive oversight.	High
Adams et al.	Coordinated approaches	Preventative	Policy review	2015	2006-2015	Macedonia	Pre-primary enrolment in Macedonia remains low, with rural and Roma children notably underrepresented. Strengthening compliance with quality standards is essential to address these disparities and improve overall access and equity in early childhood education.	High
Agirdag, Yazizi & Sierens	Universal access	Institutional	Secondary data analysis	2015	2005 to 2014	Turkey	Expanded preschool access: Pre-primary enrolments increased from 15% (2005) to 33% (2014) with expansion, but disparities remain: wealthier children were 2× more likely to attend. Grade 4 test scores show preschool-goers score higher in Turkey, but advantaged children gained slightly more, so preschool expansion alone did not fully close achievement gaps.	Moderate
Alexiadou et al.	Coordinated approaches	Institutional	Policy review	2024	1970 onwards	Finland and Sweden	Governance influences ECEC organisation and implementation in both contexts noting interplay with ideological frameworks. Investments in high quality	Low



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
	Universal access						ECEC through welfare programs, paid maternity leave and maternal workforce participation. Both countries maintained high preschool uptake during reforms.	
Arbour et al.	Targeted interventions	Multiple (Interventionist, Institutional)	Randomised Control Trial	2023	2011-2017	Chile	Chronic absenteeism: 54% → 35% chronically absent. ITS analysis: attendance gains attributed to intervention. Implies improved participation and likely better learning exposure.	Moderate
Arbour et al.	Universal access	Interventionist	Randomised Control Trial	2016	2008-2010	Chile	Intensive professional development program to improve preschool quality and attendance promotion, including data tracking and parent engagement: Absence rate fell from 16.3% to 12.9% of days in intervention schools.	Moderate
Baker et al.	Universal access	Institutional	Secondary data analysis, Difference-in-Difference	2019	1994 onwards	Canada (Quebec)	Universal \$5/day childcare policy: Childcare usage increase from 10% to 60%.	Moderate
Behbehani et al.	Coordinated approaches	Institutional	Systematic review	2024	2000-2021	Global (LMICs)	Health Outcomes: Mixed/negative – 7 of 12 studies found childcare attendance associated with more illness or worse health outcomes Growth/Nutrition: Mostly positive – 5 of 6 studies found benefits. Attending a childcare center was associated with lower malnutrition rates (less stunting and underweight) in several contexts Developmental Outcomes: Mostly positive – 4 of 6 studies showed better cognitive or social development for attendees	High
Berkes et al.	Equity and inclusion	Interventionist	Randomised control trial	2024	2016 - 2018	Cambodia	Children in villages with a newly built CPS were about 52 percentage points (pp) more likely to have ever attended a CPS by the time they were between four and six years old (or 11 pp to have ever attended any preschool). Children in treatment villages scored about 0.04 SD higher on an index of cognitive development and about 0.07 SD higher on an index of socio-emotional development, one year after the program's implementation	High
Bettendorf et al.	Targeted interventions	Institutional	Secondary data analysis	2015	2005-2009	Netherlands	Childcare subsidies increased labour participation of women in the treatment group by 2.3%-points (3.0%),	Low



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
							no causality attributed to increases in ECE participation.	
Bhatta et al.	Universal access	Institutional	Policy review	2020	2011-2020	Bangladesh	Reported gains in enrolment, curriculum standards, and teacher training; policy changes led to better school readiness and learning outcomes. While countries like Ethiopia, Lao PDR, Mongolia, and Nepal have made notable progress, global enrolment remains low. The report recommends increased investment, stronger policy coordination, inclusive partnerships, and data-driven strategies to accelerate the universal provision of pre-primary education.	Moderate
Bhutoria et al.	Coordinated approaches	Interventionist Preventative	Secondary Data Analysis	2025	2019	Global	Based on 52-country analysis using TIMSS 2019 data, examining how early parental involvement at home and preschool enrolment interact to affect 4th graders' math and science, results show one-unit increase in a parental early engagement index was linked to 0.58–0.85 higher math scores in TIMSS for children with 1–2 years of preschool (showing a synergistic effect)	Moderate
Borisova et al.	Equity and inclusion	Institutional	Policy analysis	2019	2007-2019	Global	Interventions through described to increase preschool participation in Ethiopia (low cost, expanded pre-primary); Vietnam and Kyrgyzstan (increased funding, targeting remote areas), Tanzania (free universal access, targeting remote areas) Mongolia (increased funding budget), Nepal (compulsory free pre-primary education), Ghana (teacher training), Bangladesh, Serbia and Montenegro (reformed national curriculum)	High
Brinkman et al.	Targeted interventions	Interventionist	Mixed Method (Cluster RCT + Observations)	2017	2009-2013	Indonesia	Government sponsored grants to 3,000 villages to establish new community-based playgroup preschools and training for teachers. Intervention raised preschool enrolment in these rural areas by 9pp and 7 pp at midline and endline. After funding ended, fees led to lower participation by the poorest.	High
Brownell et al.	Universal access	Institutional	Cohort	2023	1998 onwards	Canada	The study tracked 676 Métis children (271 Fulltime, 405 halftime) who attended ECEC through grade school. Findings show no significant differences in enrolment or graduation rates. Government funding aimed to	Low



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
							strengthen ELCC programs and services for Indigenous children and families	
Camaione & Muchabaiwa	Universal access	Institutional	Quantitative policy analysis	2021	2001 onwards	Eastern & Southern Africa	ECD spending in Eastern and Southern Africa remains well below international benchmarks, with only 2% of education budgets allocated to ECD. Despite rising investments, funding gaps persist, and COVID-19 has further strained public finances. The report recommends increasing budget allocations, establishing clear budget lines, enhancing data systems and oversight, and protecting ECD funding to improve quality and equity in early learning.	High
Campbell et al.	Universal access	Institutional	Secondary data analysis,	2018	2010 - 2014	United Kingdom	Sample of 206,756 children. Universal free 15 hours/week of ECE for age 3. Overall take-up from families at approximately 80% at age 3. Low-income children were almost 2× more likely to delay or miss enrolment (20% vs approximately 10%). Areas with added Sure Start centers saw +8–10 pp higher enrolment and smaller low-income gap has better outreach. Low income and ethnic/migrant families much less likely to take up full entitlement.	Moderate
Canfield et al.	Targeted interventions	Preventative	Randomised Control Trial	2023	2015-2017	USA	Tiered intervention (Smart Beginnings project) targeted at increasing parental participation, with biggest gains among families with initially low attendance (those receiving targeted interventions). Chronic absence reduced more in intervention group vs control.	Moderate
Chan et al.	Equity and inclusion	Compensatory	Correlational	2021	2019	Bhutan	Parenting support programs integrated in ECE centres. Likely increase enrolment in ECCD where parent support was active.	Moderate
Cornelissen et al.	Universal access	Institutional	Secondary data analysis,	2018	1994 - 2006	Germany	Universal free 15 hours/week of ECE for age 3. Overall take-up from families at approximately 80% at age 3. Low-income children were almost 2× more likely to delay or miss enrolment (20% vs approximately 10%). Areas with added Sure Start centers saw +8–10 pp higher enrolment and smaller low-income gap has better outreach. Low income and ethnic/migrant families much less likely to take up full entitlement.	Moderate



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
Cortázar	Universal access	Institutional	Secondary data analysis	2015	2008	Chile	Cohort study of approximately 70,000 children, Pre-K enrolment rose to approximately 85%, with longitudinal gains in learning outcomes (e.g. pre-K kids +0.15 SD reading, +0.1 SD math)	Moderate
CPAG, Neuwelt-Kearns & Ritchie,	Equity and inclusion	Institutional	Policy review	2020	2000-2019	New Zealand	20 hours free ECE and market-led expansion in the ECE sector. National preschool participation estimated to be 96% of 3–4-year-olds, but lowest-income communities is approximately 80%. Māori/Pasifika enrolment are approximately 10–15 pp below national average despite fee subsidy.	High
Dawes et al.	Targeted interventions	Preventative	Quasi-experimental	2023	n.d.	South Africa	Community playgroups: Provided ECE access where 0% had formal ECE; 3 sessions per week group achieved ~90% attendance rate	Moderate
Denboba et al.	Coordinated approaches	Institutional	Secondary data analysis	2015	2003 onwards	Indonesia	Indonesia has a robust legal and policy framework for early childhood development, yet challenges remain in coverage, equity, quality, and monitoring. Key recommendations include expanding access to pre-primary education—especially in rural and underserved areas—strengthening coordination and compliance with standards, increasing investment in health, nutrition, and teacher training, and improving data systems and accountability	High
Devercelli et al.	Coordinated approaches	Preventative	Secondary data analysis	2016	2010 onwards	Multiple LMICs	Identified policy strengths and gaps; emphasized coordination challenges and the need for investment and capacity building to improve ECE outcomes.	Moderate
Drange et al.	Universal access	Institutional	Secondary data analysis, Difference-in-Difference	2016	1992-2007	Norway	Universal access for children for 1 year at age 6: 98% of 6-yr-olds attended after reform (which is an increase from 92% prior) – modest increase, as many already in care	Moderate
Dunne et al.	Universal access	Institutional Interventionist	Quasi-experimental	2019	2022	Tmor Leste	Community-based alternative preschool enrolment in target villages rose to ~46 % of 3–5 year olds in 2 years. Attendees scored +0.5 SD higher on cognitive tests and +0.3 SD on socio-emotional index than non-attendees; 78% met emergent literacy norms vs 55% of non-attendees.	Moderate



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
Elie & Andala	Equity and inclusion	Institutional	Correlational	2021	n.d.	Rwanda	Positive correlation between school physical environment and pupils' enrolment ($r = .977$ and $p\text{-value} = .000$).	Low
Erlich et al.	Equity and inclusion	Institutional	Secondary Data Analysis, Correlational	2018	2008-2012	USA	Chronic absenteeism = 36% ($\geq 10\%$ days missed); correlates: poverty, single parent. Frequent absentees 2.5× more likely to miss K enrolment or have sporadic K attendance.	Low
Eurochild & ISSA	Equity and inclusion	Multiple (Institutional, Compensatory)	Cross-country comparative analysis	2021	2010 onwards	9 European countries- Bulgaria, Finland, France, Hungary, Ireland, Portugal, Romania, Serbia, and Spain	Identified limited data collection for children under three, gaps in universal access to early education, and regional disparities in services. The report recommends improving data systems, ensuring equitable access to quality care—especially for vulnerable groups—enhancing coordination across sectors, expanding parental support, professionalizing staff, and aligning funding to strengthen policy planning and impact.	High
Ezaki	Targeted interventions	Multiple (Interventionist, Compensatory)	Secondary Data Analysis	2022	2013-2016	Nepal	Where rapid Temporary Learning Centers opened after the Nepal earthquakes in 2015, dropout was minimal (-1%). TLCs that included play therapy saw better socio-emotional recovery and subsequent attendance.	Low
Fenech & Skattebol	Equity and inclusion	Institutional	Qualitative	2021	n.d.	Australia	Multi-component inclusion approach: Case study of 5 Australian centers: implemented “5 E’s” (Equity focus, Equip staff, Entice families, Enable access, Engage parents). Result was full enrolment of available places by low-income families in all centers (vs chronic under-enrolment before) and anecdotal reports of improved parent–teacher trust and child attendance consistency.	Low
Ganimian & Murnane	Targeted interventions	Multiple (Institutional, Interventionist)	Systematic review	2016	2000-2015	Global (LMICs)	Removing fees/uniform costs increase enrolment $\sim 5\text{--}10$ pp. Free preschool breakfast increase attendance 30%, but learning gains required quality improvements. Overall: access interventions boosted participation, but learning gains only when quality improved too.	High
Gathmann & Sass	Targeted interventions	Interventionist	Secondary data analysis	2017	2003-2010	Germany	Policy reform to raise the price of public daycare. After the reform, children are 8 percentage points less likely	Moderate



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
							to attend public daycare which implies a compensated price elasticity of -0.6.	
Gelli et al.	Targeted interventions	Interventionist Preventative	Cluster RCT	2016	2013-2015	Ghana	3-year evaluation. Intervention targeted school feeding at ECE. +30% attendance in primary (earlier studies); in this trial, households with feeding increase preschool sibling enrolment	Moderate
Gilley et al.	Equity and inclusion	Institutional	Secondary data analysis	2015	2010-2012	Australia	Many children (esp. disadvantaged) attended ~18% fewer hours than 600h target. Only approximately 45% of vulnerable children got ≥600h/year. Achievement gaps in school readiness linked to these lower ECE “dosages.”	Moderate
Gorard et al.	Targeted interventions	Interventionist	Systematic review	2023	n.d.	Global	Conditional cash transfers: almost all +5–10 pp attendance. Free uniforms: significant attendance rises. Transport provision: boosted enrolment in remote areas (various studies). Info campaigns alone minimal effect unless combined with incentives. Playgroup/community programs in low-income areas increase ECE participation for marginalized families (qualitative improvements)	High
Handa et al.	Targeted interventions	Preventative	Secondary Data Analysis	2016	Mid - 1990s onwards	Zambia	Unconditional Cash Transfers: +5 to +10 percentage points in enrolment (modest gains by relieving poverty constraints). Zambia CGP led to 6 ppts higher ECE participation vs controls.	Moderate
Harrison et al.	Equity and inclusion	Multiple (Institutional Interventionist)	Policy analysis	2024	2019	Australia	Average attendance = 576/600h (96%). Long daycare kids often ≥600h; stand-alone preschool kids ~10–15% below (due to illness, fewer days). Disadvantaged kids attended ~24h less (4% less) on avg. Universal policy raised overall enrolment to ~91%, and linked to +0.2σ higher literacy at school start vs. pre-policy cohorts. Universal 600 hours/year preschool: Enrolment of 4-year-olds ≈91%, but children attended ~490 hours on average (18% below target). Only ~45% received ≥600 hrs; Indigenous and remote children lowest (≈30% met 600 hrs). Policy still improved average language scores at school entry by +0.2 SD over decade (population-level).	High



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
Heath et al.	Coordinated approaches	Interventionist	Quantitative	2018	n.d.	Australia	Higher parent education and SEI, and better child language skills were good predictors of attendance (87%), but poor predictors of nonattendance (42%). Factors influencing parent engagement in ECE programs: Barriers: work conflicts, lack transport, feeling unwelcome (cultural/language). Enablers: flexible hours (part-day options), sibling care at centers, free supplies (uniforms, books), active follow-up on absences. When barriers removed, parents attended programs more regularly, improving children's engagement (anecdotal).	Low
Ho & Pavoni	Targeted interventions	Institutional	Policy review	2020	n.d.	USA	Optimal subsidies: income-tiered, free hours for low-income. Cites e.g. Berlin's fee removal: +11% enrolment for low-SES toddlers. In general, lower fees = higher ECE uptake, higher maternal employment. Overly small or complex subsidies underused; universal but targeted ones maximize participation and work returns.	Moderate
Holla et al	Universal access	Institutional	Evidence review	2021	2008 onwards	Global	When experimentally offered access to pre-primary education, children are on average 1.4 SD more likely to participate in the pre-primary program than their control group counterparts, suggesting strong demand for services. This is approximately equivalent to a 30-percentage point increase in pre-primary school participation.	High
Hojman & Boo	Universal access	Institutional	RCT	2022	2011-2015	Nicaragua	Enrolment surged where centers opened (nearly full uptake among eligible families). Maternal employment +8 pp. high returns (6.2) via both child development and mothers' income. Provided care for children aged 0–4 for half a day, five days a week. Meals were also provided to all children, micronutrients distributed to children aged 6–24 months, and family support services offered. evidence that the program provided benefits for children and mothers- a positive impact of 0.38 standard deviations on socio-emotional skills Pre-primary enrolments grew from 5% to 45%. Urban–rural gap in readiness narrowed.	High



Reference	Intervention Type	Policy category	Nature of evidence	Year of the study	Time period covered	Geographical coverage	Magnitude/direction (& size) of the impact (if any)	Evidence Quality Rating
Jessen et al.	Equity and inclusion	Institutional	Quasi-experimental	2020	2012-2016	Germany	Initially a 19 pp gap in daycare use existed between the highest- and lowest-educated families. One year after making daycare free, low-income toddler enrolment rose 11%, shrinking the socio-economic usage gap by ~6 pp (from ~19 to 13 pp). Cost factors accounted for ~60% of the original gap. Low-SES daycare use +11% after fees removed; socio-economic enrolment gap shrank approximately 19pp to 13pp in one year. High-SES usage unchanged (already high). Demonstrates free ECE → big jump in disadvantaged children's participation.	Moderate
Kidwai & Chen	Coordinated approaches	Preventative	Policy review	2016	2001 onwards	China	Found high enrolment rates but uneven quality; recommended improvements in governance, equity, and resource allocation; highlighted increased preschool availability with mixed quality outcomes.	High
Kim	Universal access	Institutional	Quasi-experimental	2022	2010-2016	Ethiopia	Pre-primary enrolments grew from 5% to 45%. Urban-rural gap in readiness narrowed. proportion of children who participated in preschool was 27.4% for those living in an urban area and 11.4% for those living in a rural area. In 2016, this proportion increased significantly in both locations: 50% of children from urban areas and 34% of children from rural areas participated in preschool before they entered formal schooling.	Moderate
Lamb	Universal access	Institutional	Qualitative	2020	n.d.	Australia	Enablers: bilingual staff, cultural celebrations at center, onsite trauma support. When provided, refugee family enrolment increase (anecdotal) and parents report children more comfortable and learning more. High engagement makes ECE a form of trauma recovery.	Low
Landivar et al	Universal access	Institutional	Secondary data analysis	2021	2016	USA	Maternal employment effects: High childcare cost → lower maternal employment. Higher Head Start enrolment & subsidy use → higher maternal employment (especially for less-educated moms). Cheaper, accessible ECE increase participation and allows moms to work.	Moderate



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Little et al.	Targeted interventions	Preventative	Meta-analysis	2021	2014-2021	Global (LMICs)	Conditional Cash Transfers: Small effect sizes in favour of cash-plus but not statistically significant in many cases	High
Mateo Diaz et al.	Targeted interventions	Interventionist	Experimental	2020	2016	Uruguay	Attendance by children in the 25th–75th percentiles of absenteeism rose by 0.32–0.68 days over the course of the 13-week intervention of using reminders through a government mobile app, and attendance among children in remote areas increased by 1.48 days.	Moderate
Mbiti	Equity and inclusion	Institutional	Policy review	2016	n.d.	Global (LMICs)	Higher teacher attendance; more equitable resource allocation to rural preschools; greater parental demand for ECE when schools accountable	Low
McCoy et al.	Universal access	Institutional	Meta-analysis	2017	1960-2016	Global HICs	Pre-school participation: -8.1 pp in special education placement; -6.8 pp in grade retention by age 14; +11.4 pp high school graduation rate. (All differences statistically significant).	High
Morrisey et al.	Universal access	Preventative	Secondary data analysis	2022		USA	Community ECE availability: Rural children 13% less likely to attend preschool than urban if ECE supply is low; when Head Start present, rural–urban readiness gap closed (>90% of rural kids ready vs. 65% without ECE)	Moderate
Moses	Universal access	Institutional	Secondary data analysis	2021	2013-2018	South Africa	2 years expanded pre-primary education: <40% of 3–4 y/os attend any ECD program. Children with 2 years of pre-primary scored higher in Grade 1 literacy (68% passed vs 55% with no preschool) in a Gauteng study; a 2013 subsidy expansion added ~15,000 rural children to ECD centers within 3 years.	Low
OECD	Universal access	Institutional	Policy review	2019	2002 onwards	Indonesia	Expanded capacity and improved access; effect size depends on scale. Example: Indonesia trained >50k community teachers 2005–2015, helping raise enrolment from 21% to 72%. Mexico: net enrolment of 3–5-year-olds rose from ~70% to ~95% after 2002 mandate (3 yrs compulsory).	Moderate
Page et al.,	Targeted interventions	Multiple (Institutional, Interventionist)	Quasi-experimental	2019	2013-2017	Australia	Abecedarian Approach in community playgroups: Higher session attendance → higher dev. scores: high-dose kids scored ~10 points higher on language scale vs. low-dose ($p < .05$). Chronic absence nullified	Moderate



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							program effect. Playgroup participation rose from 60% to 85% over 2 years.	
Palik & Østy	Equity and inclusion	Preventative	Scoping review	2023	1990-2021	Global	Conditional cash transfer for refugee and displaced including Primary-aged children reported: +6–13 pp school attendance	Low
Pascal et al.	Equity and inclusion	Institutional Preventative	Quantitative	2021	n.d.	Rwanda	Schools with fees > RWF 20k/year had 22% lower enrolment than free ones (65% vs 87%). Income-based fee exemptions increased enrolment of poor children by ~30%	Moderate
Qi & Melhuish	Universal access	Institutional	Policy review	2017	2001-2014	China	Enrolments climbing rapidly due to government initiatives. By the mid-2010s, over 75% of 3–6 year-olds in China were attending some form of ECE. Policies aiming for universal kindergarten for 3–5 year-olds by 2020, which led to a massive expansion of kindergarten facilities nationwide.	Low
Raikes et al.	Coordinated approaches	Institutional	Secondary data analysis	2023a	2015-2019	Global	National expenditure: Countries spending >1% GDP on ECCE achieved >=80% enrolment and narrowed urban–rural gaps to <10 pp	Moderate
Raikes et al.	Universal access	Institutional	Policy review	2023b	2007-2017	Brazil	Mandatory pre-school education and investments in infrastructure and human resources have led to a tremendous increase in ECE enrolment over recent years with almost 95% of children of ages 4–6 years enrolled in preschool	Low
Rao et al.	Equity and inclusion	Institutional	Secondary data analysis	2023	2010 onwards	China	Equity focused ECE expansion: Rural kindergarten GER up from 24% (2005) to 85% (2019). SES gap in attendance <5 pp by 2019 (almost universal) GER of the 3- to 6-year-old children's ECE increased to 89.7% in 2022	High
Rao et al.	Universal access	Interventionist	Multi-country observational study	2019	2013-2014	East Asia/Pacific (Cambodia, China, Mongolia, and Vanuatu)	Preschool attendance for 1-3 year in any preschool is associated with +0.3–0.4 SD higher cognitive and language scores at age 5. Each additional year ⇒ +0.10–0.15 SD cognitive gain; full-day attendance yielded better outcomes than half-day.	Moderate



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Rogers & Feller	Targeted interventions	Interventionist	Randomised Experiment	2018	n.d.	USA	10–20% reduction in chronic absenteeism. <i>Example:</i> USA nudges trial: 17% drop in chronic absences with text alerts (Pre-K).	Low
Saqipi et al.	Coordinated approaches	Institutional	Policy review	2021	2010-2020	Kosovo	Preschool is free and compulsory from age 5. There is some evidence of high enrolment at age 5–6 (92%), but it is low for under-5s.	High
Schmutz	Universal access	Institutional	Systematic review and Meta-analysis	2024		Global	Findings indicate that universal access benefit more children from disadvantaged families. Low SES children benefit more in the non-cognitive domain than high SES children. Starting ECEC before age three improves the chances of better outcomes for disadvantaged children. The results demonstrate significant variability across regions, with European programs standing out in delivering positive outcomes for children from vulnerable backgrounds.	High
Scholz et al.	Universal access	Instiitutional	Secondary data analysis	2018	2007-2018	Germany	Nationwide under 3 enrolments reached 33% in 2015 (up from 15% in 2007). However, only 16% of 1–2-year-olds with low-educated mothers attended vs 38% with high-educated mothers. Among 3–5 year olds, overall participation ~93%, but migrant background children had slightly lower rates (e.g. 90%) and tended to start later. Recent policies (fee reductions, legal right from 1) aim to close these gaps.	Moderate
Seidenfeld et al.	Targeted interventions	Preventative	Randomised Control Trial	2015	2010-2012	Zambia	Unconditional Cash Transfers: CGP provided unconditional cash transfers to families to improve early child development outcomes. It is a targeted program- for household within a district with a child under 5 years old. The CGP impacts the support for learning scale by 0.497, i.e., the CGP households have nearly 0.5 more activities attributable to the program than non-CGP households	High
Shrestha	Coordinated approaches	Institutional	Policy review	2023	1950 -	Nepal	The average ECED gross enrolment rate has reached at 89.62 per cent in 2021 and achieved progress in gender (0.92) parity in ECED. Ministry of Education records showed ECED Gross Enrolment is 76.7% in 2013 and the targets for 2015 was 99 per cent. About 22% of	Low



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							children were not covered by formal education program by the end of 2015.	
Snilstveit et al.	Targeted interventions	Preventative	Academic	2016	1990-2015	Global	Conditional Cash Transfers: +10 to +15 percentage points in preschool enrolment for beneficiary children.	Moderate
Sommer et al	Targeted interventions	Compensatory	Experimental	2017	2013-2014	USA	Study reported a 4.8% to 5.1% increase in their winter attendance, equating to about two extra days of attendance in the winter. There was no effect on fall or spring attendance or on attendance averaged over the full year as a result of the intervention targeting parent social networks.	Low
Su et al.	Coordinated approaches	Multiple (Institutional, Interventionist)	Secondary data analysis	2020	2010-2016	China	The overall rate of preschool attendance increased from 59.34% in 2010 to 69% in 2014, although it dropped slightly to 66.33% in 2016. Preschool attendance rates for rural areas and the Western region recorded larger increases (15.27% and 12.71%, respectively) than the 6.99% increase reported for the overall sample. The rural-urban gap in preschool attendance rate decreased from 27.6% in 2010 to 5.42% in 2016.	
Tyler et al.	Targeted interventions	Interventionist	Academic	2018	2014	New Zealand	In 7 low-enrolment Auckland centers, staff used continuous improvement to address barriers. Over Jan–June 2014, median enrolment rate rose from 76% to 89% and median attendance rate from 45% to 59%. All centers met or exceeded their enrolment targets post-intervention, without extra funding, by improving practices (e.g. weekly data reviews, family follow-ups)	Moderate
Ulep et al.	Coordinated approaches	Multiple (Institutional, Interventionist)	Mixed methods	2024	1974 onwards	Philippines	Participation rates in pre-kindergarten programs for Filipino children aged 3-4 low, with only 20% participating in 2022. Disparities across regions range from 5% to 40%, indicating uneven access. Despite government efforts such as school-based feeding programs, access remains limited, with only 23% of children benefiting Revealed slow service coverage growth; recommended increased funding and better implementation; projected improvements in enrolment,	High



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							care quality, and long-term child development outcomes.	
UNESCO	Equity and inclusion	Multiple (Institutional, Preventative, Interventionist)	Policy review	2024	n.d.	Global	Indirectly raises attendance; e.g. centers with high process quality have 5–10% higher regular attendance rates (correlation).	Moderate
UNICEF	Universal access	Institutional	Policy review	2022	n.d.	Global	Higher enrolment rates observed where policies mandate 2-years pre-k participation in ECE, with inequities persisting due to fees or shortages	Moderate
UNICEF	Coordinated approaches	Institutional	Policy review	2019a	n.d.	Global	Paid parental leave and workplace childcare: Each extra month of paid leave correlates with +2.8 pp higher preschool enrolment at age 4 (21-country analysis). Companies offering on-site childcare saw >90% of new mothers return to work vs ~60% nationally, and reported better child developmental outcomes (lower stress, higher ECDI scores) for employees' children (India pilot data).	High
UNICEF	Universal access	Institutional	Policy review	2019b	2010-2018	Ethiopia	Free kindergarten: +15 to +30 percentage points in enrolment of target age group after fees removed. GER jumped from 5% (2010) to 45% (2018) post-O-Class introduction of free kindergarten.	High
Valenzuela et al	Coordinated approaches	Compensatory	Academic	2023	2020	Venezuela	Caregivers reported greater knowledge of protective practices for children in transit, and how to employ positive parenting practices and design spaces for play and relaxation.	Low
Vindrola, et al.	Universal access	Institutional	Policy review	2024	2009-2022	Pacific Island Countries and Territories (PICTs)	Access to ECE varied widely in PICTs. From the 13 PICTs that mandate the provision of free ECE for at least one year, nine achieved net enrolment rates (NERs) over 88 per cent. E.g. Provision in government-run Fijian preschools had a positive effect on access to ECE with substantial increases in enrolment rates from 81.1 per cent in 2017 to 92.0 per cent in 2021	High
Young Lives	Universal access	Institutional	Secondary data analysis	2016	2010 onwards	Ethiopia	Pre-primary expansion: Gross enrolment jumped from 5% (2000) to 39% (2015) after launch of O-Class one-year school readiness program. Urban enrolment ~3× higher than rural. Government's ESDP V target of 80%	Moderate



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							by 2020 not yet met, but accelerated training of 15,000 O-Class teachers led to an additional ~1 million children enrolled by 2019 (Young Lives, 2016).	
Zhou et al.	Universal access	Institutional	Secondary data analysis	2017	2005-2015	China	National ECE expansion: Preschool gross enrolment rose from 45% (2005) to 77% (2015). Government built 30k new kindergartens (2010–15), cutting rural no-access rate from 50% to 20%. Urban–rural gap persists (e.g. 2015: rural ~55%, urban ~95% enrolled).	Moderate