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International Horizon Scanning and Learning Report

Early childhood education and care

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World Health Organization
Collaborating Centre on Investment
for Health and Well-being

Overview

The International Horizon Scanning and Learning reports were initiated as part of the COVID-19 public health response, to support dynamic response and recovery measures and planning in Wales. They varied in focus and scope, depending on the evolving COVID-19 situation and public health/policy needs at that time. The reports focussed on COVID-19 international evidence, data, experience, policy and public health measures, transition and recovery approaches. Learning and intelligence was collated and synthesized to understand and explore solutions for addressing the ongoing and emerging health, well-being, social, economic and environmental impacts (potential harms and benefits) of the pandemic.

The scope of the reports was expanded in spring 2022 to cover priority public health topics, including in the areas of health improvement and promotion, health protection, and health care public health. The report topics and findings are aligned with and help inform decision-making and on-going work in Welsh Government, the NHS and Public Health Wales. They are also disseminated to wider network of (public) health professionals and partners nationally and internationally.

This is part of a wider Public Health Wales' systematic approach to intelligence gathering and evidence translation into policy and practice, supporting coherent, inclusive and evidence-informed action, which progresses implementation of the Wellbeing of Future Generations (Wales) Act and A Healthier Wales strategic plan towards a healthier, more equal, resilient, prosperous and globally responsible Wales.

Disclaimer: The reports provide a high-level summary of learning from real life experiences from selected countries, and from a variety of scientific and grey literature, including sources of information to allow further exploration. The reports are not comprehensive and are not aimed at providing detailed, robust or in-depth evidence review, analysis or quality assurance. They are meant to offer a brief snapshot or current evidence, policy and practice, sharing relevant country examples and key (reputable) international bodies' guidance and principles.

In focus:

 **Early childhood education and care**

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At a glance: summary of international learning

“...today’s children are tomorrow’s skilled workers. Doctors. Teachers. Lawyers. Leaders. Their productivity will fuel tomorrow’s economies. Their capacity to contribute will shape tomorrow’s societies. What we do now to foster their brain development and potential will determine their futures – and our own.”
Anthony Lake, UNICEF Executive Director¹

Early childhood education and care

- ✚ Early childhood education and care (ECEC) is defined as “**any regulated arrangement that provides education and care for children from birth to compulsory primary school age**”
- ✚ ECEC capitalises on a **period of rich brain development for children** that can **lay the foundation** for good health and nutrition, learning and educational success, social-emotional learning, and economic productivity throughout life
- ✚ The role of ECEC often depends on **history and tradition** and can be attributed to **industrialisation and changes in family structure**; with childcare **predominantly a task for female** family members
- ✚ ECEC is key within family-friendly policies with the potential for a “**triple dividend**” of **children’s positive development, women’s empowerment and economic growth**
- ✚ Across the policy landscape, **ECEC cannot be considered in isolation**
 - A “**two generation**” or **family oriented approach** is recommended
 - Links with **parental leave and breastfeeding policies** are crucial
- ✚ **A lack of ECEC disproportionately affects women** and increasing access to ECEC is one mechanism by which to **improve women’s employment**
- ✚ **Family-friendly policies can benefit businesses** through staff recruitment, retention and well-being, increased productivity, and promoting brand reputation
- ✚ Five **quality domains** for ECEC have been identified:
 1. **Access**
 2. **Staff**
 3. **Curriculum**
 4. **Monitoring and evaluation**
 5. **Governance and funding**
- ✚ Some **groups of children are less likely to access ECEC**, including:
 - Children with health conditions or disabilities
 - Migrant children
 - Children with mothers in prison
 - Children from lower income families
- ✚ Increasingly, **OECD countries are moving towards an integrated approach to ECEC**: the Ministry of Education is responsible for education and childcare
- ✚ Welsh Government funds **three ECEC programmes**, planning to adopt an **integrated approach linking education, childhood development, and health** with a focus on

¹ https://www.unicef.org/media/48886/file/UNICEF_Early_Moments_Matter_for_Every_Child-ENG.pdf

EYCC, reaching children in deprived areas, increasing Welsh language provision, and facilitating parental employment, particularly amongst women:

1. Flying Start for 0-3 year olds
2. Childcare Offer for 3-4 year olds
3. Early Education for 3-4 year olds

Country insights

Estonia

- Integrated childcare and early education system for children **aged 18 months to 7 years**
- **ECEC programmes meet multiple quality indicators** including high attendance
- Policies seek to **reduce inequalities in access**
- **Reducing language barriers** for Russian-speaking children is a priority

Denmark

- ECEC is guaranteed for all children between **26 weeks until school-age at 6 years**
- **Children's play is a central part** of Denmark's childcare provision
- ECEC is **financed by both the municipality and parents** through income-based subsidies
- Denmark has **high uptake of ECEC and women in work**

Sweden

- Sweden allocates 32.1% of its 627.4 billion USD GDP for welfare and social care; **1.1% of GDP is targeted towards childcare for children under 3**
- Sweden has a **fully integrated early years childcare system for children aged 1-6**, delivered by municipalities
- ECEC is **funded predominantly by the state**, with low parental contribution
- **Preschool childcare for unemployed parents** has increased the number of women in paid employment

Chile

- *Chile Crece Contigo* is an **integrated social protection programme** including childcare alongside other services to support early years development
- The programme offers **universally accessible services for all children under 5**, with specialised services for the most vulnerable households
- **Increased pre-school attendance, developmental and health benefits** at 10-year programme evaluation

Early childhood education and care: overview

Introduction

- **Early childhood** is defined as the “*period from conception to school entry*”²
- **Early childhood education and care (ECEC)** is defined as “*any regulated arrangement that provides education and care for children from birth to compulsory primary school age*”³
- **Early years childcare (EYCC)** is often included within integrated ECEC programmes
- ECEC capitalises on a **period of rich brain development for children**, which can lay the **foundation** for good health and nutrition, learning and educational success, social-emotional learning, and economic productivity throughout life⁴
- The United Nations (UN) Sustainable Development Goal (**SDG**) **4.2 commits countries 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*” by 2030⁵
- The **role of ECEC depends on history and tradition**, for example:
 - ✓ It may be partially attributed to **industrialisation and changes in family structure**, e.g. fewer extended families, decline in birth rate, increased single-parent families; and resultant need for extra-parental care for children’s socialisation and education⁶
 - ✓ Childcare is **predominantly a task for female** family members in many countries, such as Japan, leading to less prevalent formal childcare services, childcare shortages, and “waitlisted children”⁷; and requiring new approaches, such as formal recognition (parental leave) for grandparents⁸.

ECEC and EYCC as part of key family-friendly policies, including:⁹

- **Paid leave** - maternity, paternity, parental, and leave to care for sick young children
- **Child benefits** and **minimum/fair wage** policies
- **Breastfeeding** policies
- A “**Family-Friendly Policies Initiative**” reconciles work and family commitments and promote children’s development and well-being¹⁰
- Referred to as “**two generation**” approaches with potential for a “**triple dividend**”:¹¹
 - 1) **young children’s positive development,**
 - 2) **women’s empowerment, and**
 - 3) **economic growth**

1) Children’s positive development

- ECEC provides a major social infrastructure to support **inclusion, equity and social mobility**¹²
- ECEC can provide a source of responsive stimulation **to foster cognitive and language development, social competency, and emotional development**¹

² [Early Childhood Development in the UNICEF Strategic Plan 2018-2021.pdf](#)

³ [Early childhood education and care initiatives | European Education Area \(europa.eu\)](#)

⁴ [What you need to know about early childhood care and education | UNESCO](#)

⁵ [4.2 by 2030 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 – Indicators and a Monitoring Framework](#)

⁶ <https://files.eric.ed.gov/fulltext/ED472359.pdf>

⁷ [The cultural politics of childcare provision in the era of a shrinking Japan](#)

⁸ <https://www.japantimes.co.jp/news/2022/10/10/national/grandchildren-care-leave/>

⁹ [Redesigning the workplace to be family-friendly: What governments and businesses can do | UNICEF](#)

¹⁰ [Family-Friendly Policies: Handbook for Business.pdf \(unicef.org\)](#)

¹¹ [UNICEF-Childcare -Family-Friendly-Policies-2019.pdf](#)

¹² <https://op.europa.eu/en/publication-detail/-/publication/4c526047-6f3c-11eb-aeb5-01aa75ed71a1/language-en/format-PDF/source-276830736>

- Participants in interactive play and communication programmes demonstrate **better cognitive, language, motor and social-emotional development scores** than children in a control group at age one¹
- **High quality EYCC** has demonstrated **significant positive impacts for disadvantaged and very young children**¹³, for example, the Abecedarian Project in the United States has demonstrated positive impacts on: development at 18 months; reading and maths attainment throughout school; decision making; and reduced adult criminal behaviour

2) Women's empowerment

- **A lack of EYCC disproportionately affects women**, as childcare responsibilities often compromise women's economic empowerment¹¹
- **Unpaid care** is the primary factor that **keeps women from joining the workforce**^{10,14}
- 46% of women aged 15+, compared to 72% of men, globally participated in the labour force in 2021¹⁵
- **Childcare and parental leave policies can have significant impact**, for example, Latin America has had a significant increase in women's workforce participation¹⁶
- **COVID-19 has had a differential impact on working women** where childcare was no longer available and women disproportionately took on childcare, for example:^{17,18}
 - ✓ In Germany, mothers were more affected than fathers, even in couples where both partners had similar work pressures
 - ✓ Some women in Italy, though able to take paid parental leave, risked losing their job
 - ✓ Positive outcomes were also noted, such as increased time spent together as a family; and increased participation of fathers in the lives of young children
- **Policy responses to augment women's employment** include:
 - ✓ **Support for breastfeeding mothers**¹⁰
 - ✓ **The development/expansion of subsidised childcare**¹¹ - increasing both women's employment rates and the number of hours worked; with a particular impact in areas of low female labour force participation

Case study: Turkey¹⁰

Male factory workers requested their employer to provide a childcare subsidy to all staff whose children were enrolled in preschool/kindergarten and whose spouses were in formal employment. A monthly subsidy was arranged of 200 Turkish lira for each child aged 3-6. This provided an **efficient solution to promote women's employment**.

Case study: Bangladesh¹⁹

UNICEF's Mothers@Work programme, launched in 2017, supports breastfeeding support policies and practices in garment factories including provision of breastfeeding spaces, childcare provision, and employment protection. The programme has expanded to 92 factories (reaching 160,000 women). Results demonstrate **increased productivity**, and **increased exclusive breastfeeding from 12% to 17%**.

3) Economic growth

Quality affordable childcare contributes to economic growth, with estimates showing:¹¹

- Increased Gross Domestic product (GDP) with more women in the workforce

¹³ <https://openknowledge.worldbank.org/bitstream/handle/10986/35062/Better-Jobs-and-Brighter-Futures-Investing-in-Childcare-to-Build-Human-Capital.pdf?sequence=5&isAllowed=y>

¹⁴ https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_633135.pdf

¹⁵ <https://data.worldbank.org/indicator/SL.TLF.CACT.MA.ZS>

¹⁶ <https://www.imf.org/en/Publications/WP/Issues/2017/02/14/Women-at-Work-in-Latin-America-and-the-Caribbean-44662>

¹⁷ [Early childhood education and care and the Covid-19 pandemic - Publications Office of the EU \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&code=sdg_5_5.2)

¹⁸ [Governing quality early childhood education and care in a global crisis - Publications Office of the EU \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&code=sdg_5_5.2)

¹⁹ <https://documents1.worldbank.org/curated/en/867371582283308546/pdf/Tackling-Childcare-The-Business-Benefits-and-Challenges-of-Employer-Supported-Childcare-in-Bangladesh.pdf>

- 7% return on investment to society through benefits of improved early childhood development

Case study: Bangladesh¹⁹

A 2019 survey in Bangladesh found 23% of 306 companies provided childcare. Of companies that offered childcare:

- 51% reported **improved profitability**
- 56% agreed **childcare solutions advanced women's careers**
- 65% agreed it **facilitated talent acquisition**

Case study: Vietnam²⁰

A factory offers employees a kindergarten, monthly childcare allowance, and subsidised onsite accommodation. These benefits **help recruitment, increase employee retention rates, and enhance brand reputation.**

Ensuring high quality ECEC^{13,21}

- A European ECEC quality framework details **five quality domains** (Table 1)
- **Low quality ECEC may result in low uptake** as parents do not trust or value the service
- Potential benefits of EYCC may not be realised in low quality services
- Parents may balance the costs (financial and other), safety, and stimulation of attending EYCC versus looking after their child at home

Table 1. ECEC quality statements with selected country examples²¹

Quality domain	Quality statements	Country examples
Access	<ul style="list-style-type: none"> • Provision that is available and affordable to all families and their children • Provision that encourages participation, strengthens social inclusion and embraces diversity 	Romania: The European Social Fund initiative was introduced (2018-20) to promote ECEC social inclusion for children with special education needs; children from the Roma community; children from rural and disadvantaged communities; and children from vulnerable groups
Staff	<ul style="list-style-type: none"> • Well-qualified staff with initial and continuing training that enable them to fulfil their professional role • Supportive working conditions including professional leadership which creates opportunities for observation, reflection, planning, teamwork and cooperation with parents 	Ireland: Introduced the government initiative "Better Start" in 2014, a national early years support service that provides advice, mentoring and training to practitioners
Curriculum	<ul style="list-style-type: none"> • A curriculum based on pedagogic goals, values and approaches which enable children to reach their full potential addressing their social, emotional, cognitive and physical development, and well-being • A curriculum that requires staff to collaborate with children, colleagues and parents and to reflect on their own practice 	Portugal: Curriculum guidelines were updated in 2016, to include learning areas: 1. Personal and social development 2. Expression and communication: physical education, art education, oral language and literacy, mathematics, knowledge of the world, educational continuity and transition
Monitoring & evaluation	<ul style="list-style-type: none"> • Monitoring and evaluating produces information at the relevant local, regional and/or national level to support continuing improvements in the quality of policy and practice • Monitoring and evaluation which is in the best interest of the child 	Spain: The Ministry of Education and Vocational Training publishes annual statistics by educational level including early years and students with specific educational support needs

²⁰ [Final IFC Childcare Vietnam Web.pdf](#)

²¹ [Toolkit for inclusive early childhood education and care - Publications Office of the EU \(europa.eu\)](#)

Governance & funding	<ul style="list-style-type: none"> Stakeholders have a clear and shared understanding of their role and responsibilities, and know that they are expected to collaborate with partner organisations Legislation, regulation and/or funding supports progress towards a universal entitlement to high-quality affordable early childhood education and care, and progress is regularly reported to relevant stakeholders. 	Cyprus: The government provides a subsidy towards expenses for community kindergartens (operational when the public kindergarten classes do not meet the needs of children aged three to four years and eight months). Parents pay remaining expenses of operating these schools. Attendance fees for community schools are much lower than private school fees
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Equitable access

- **Children in low-income families** may be at particular risk of being deprived of access to essential services (*Figure 1*)²⁰
- Some children are less likely to attend ECEC (*Table 2*)²¹
- Globally, **ECEC is often given low priority in education policy and investment**; marginalised groups may be excluded²²

Figure 1. Disparities in early learning based on wealth: percent of children aged 3-5 years who do not attend ECEC by wealth quintile. Countries selected where overall attendance less than 40%. Source UNICEF¹

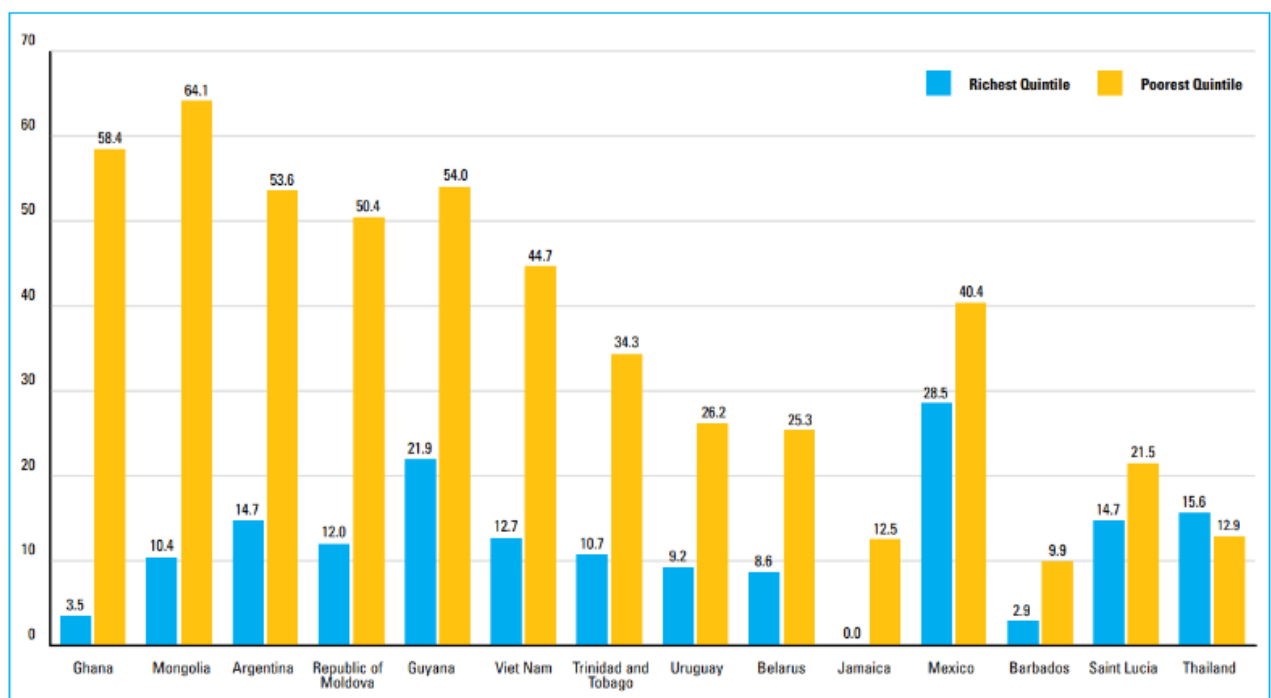


Table 2. Groups identified with additional barriers to accessing ECEC in Europe²¹

Highlighted group	Barriers
Children with health conditions	– Significant negative impact on attendance due directly to ill health, or the need to remain at home/hospital for long periods of time
Children with disabilities	– ECEC can be particularly beneficial for children with disabilities as it provides services/structures to identify and support developmental delays and disabilities

²² [What you need to know about early childhood care and education | UNESCO](#)

	✓ In France in 2018, 54% of children with disabilities were cared for only by their parents (compared to 32% of non-disabled children)
Children with migrant backgrounds	<ul style="list-style-type: none"> – Variation across Europe; often linguistic and cultural barriers – ECEC for refugee and asylum seeker children is often lacking at reception centres
Children with mothers in prison	<ul style="list-style-type: none"> – Policies vary, but living in a prison setting can cause additional barriers – Children who live in prison with their parent, often their mother, can suffer due to confinement, inadequate space, the lack of visual, olfactory and auditory stimuli which can influence child development
COVID-19	– During lockdown periods many ECEC facilities remained closed or partially open

International approach to EYCC

- The policies of 41 high-income countries across the domains of **parental leave, and childcare access, quality, and affordability** were compared by UNICEF (*Appendix 1*)²³
- Increasingly, countries have developed an **integrated system**, where responsibility for administering all ECEC services lies with one lead authority (*Table 3*)²⁴

The **Countries Insights** selected for this report provide **examples of effective and/or innovative EYCC policies**, including:

- Selected countries are ranked highly by UNICEF (*Appendix 1*)²³
- Estonia and Denmark have developed early years programmes and policies that integrate childcare, education, and health systems
- Chile’s ECEC programme recently underwent a 10-year evaluation process²⁵

Table 3. Organisation of ECEC in OECD countries²⁴

Responsibility	Countries
Ministry of Education responsible for the whole ECEC system	Australia, Brazil, Chile, Costa Rica, Estonia, England, Finland, Hungary, Iceland, Latvia, Lithuania, Luxembourg, New Zealand, Northern Ireland, Norway, Scotland, Slovenia, Spain, Sweden
Ministry of Education responsible for pre-primary education Other authorities (e.g., Ministries of Health and Welfare, Labour, Social Affairs) responsible for ECEC for younger children and other services	Belgium, Czech Republic, France, Italy, Korea, Netherlands, Portugal, Poland, Slovak Republic, Switzerland
Different authorities responsible for different components of the ECEC system	Austria, Canada, Colombia, Denmark, Germany, Ireland, Japan, Mexico, United States

EYCC in Wales

- EYCC is within the portfolio for Health and Social Services; and is specifically the responsibility of the Deputy Minister for Social Services
- There are three Welsh Government funded early years programmes in Wales (*Table 4*).

²³ [where-do-rich-countries-stand-on-childcare.pdf \(unicef-irc.org\)](https://www.unicef-irc.org/files/publications/where-do-rich-countries-stand-on-childcare.pdf)

²⁴ [How do early childhood education systems differ around the world? | Education at a Glance 2019 : OECD Indicators | OECD iLibrary \(oecd-ilibrary.org\)](https://www.oecd-ilibrary.org/education/how-do-early-childhood-education-systems-differ-around-the-world?ref=byline)

²⁵ <https://docs.iza.org/dp11847.pdf>

- Welsh Government plans to adopt an ECEC approach for children aged 0-5 through the creation of **one single system linking education, childhood development, and health with an emphasis on the EYCC.**
- Initial expansion will focus on **reaching children in deprived areas and increasing Welsh language provision**²⁶
- The policy also aims to **facilitate parental employment**, particularly amongst women²⁷

Table 4. Welsh Government funded ECEC

Programme	Policy aims	Eligibility	Delivery model
Flying Start ²⁸	<ul style="list-style-type: none"> – Children are healthy and thriving – Families are capable and coping 	<ul style="list-style-type: none"> – 2-3 year olds in areas of highest deprivation – Eligibility being expanded since September 2022 – Ambition to extend to all 2–3-year-olds 	Multiagency, holistic support through: <ol style="list-style-type: none"> 1. High quality childcare (12.5 hours/week for 39 weeks/year) 2. Enhanced health visiting service 3. Parenting programmes and support 4. Speech, language, and communication development support
Childcare Offer ^{29,30}	<ul style="list-style-type: none"> – Enable parents, particularly mothers, to return to work – Increase disposable income of those in work – Encourage child development and school readiness 	<ul style="list-style-type: none"> – 3-4 year olds – Both parents work and earn no more than £100,000/year – Plan to extend to parents in full time education or on the edge of work 	<ul style="list-style-type: none"> – 30 hours/week education/childcare, and access to private sector provision – Specific provision to support children with additional needs
Early Education ³¹	<ul style="list-style-type: none"> – All-around development – Learn through play 	<ul style="list-style-type: none"> – 3-4 year olds – Universal 	<ul style="list-style-type: none"> – 10 hours/week during term time – Variation by local authority

²⁶ <https://gov.wales/phased-expansion-early-years-provision#:~:text=The%20Childcare%20Offer%20for%20Wales,parents%20in%20education%20and%20training.>

²⁷ <https://research.senedd.wales/research-articles/breaking-down-the-barriers-childcare-and-parental-employment/>

²⁸ [Flying Start expanded in Wales | GOV.WALES](https://gov.wales/flying-start-expanded-in-wales)

²⁹ [Evaluation of Year 4 of the Childcare Offer \(gov.wales\)](https://gov.wales/evaluation-of-year-4-of-the-childcare-offer)

³⁰ [https://gov.wales/written-statement-expansion-childcare-offer-](https://gov.wales/written-statement-expansion-childcare-offer)

[wales#:~:text=In%20our%20Programme%20for%20Government%20we%20committed%20to,increase%20economic%20growth%2C%20tackle%20poverty%20and%20reduce%20inequalities](https://gov.wales/written-statement-expansion-childcare-offer#:~:text=In%20our%20Programme%20for%20Government%20we%20committed%20to,increase%20economic%20growth%2C%20tackle%20poverty%20and%20reduce%20inequalities)

³¹ <https://gov.wales/get-30-hours-childcare-3-and-4-year-olds/early-education>

Country insights

Estonia

Overview

- Estonia, a parliamentary republic of 1.3 million people, gained independence from the Soviet Union in 1991³²
- It ranks favourably compared to the UK in terms of income inequalities and child poverty rate (*Appendix 2*)^{33,34}
- Estonia is working towards a **strong social welfare system**, with reform of education, care and health systems³⁵
- The **Child Protection Act of 2014 promotes child development and support**:³⁵
 - ✓ The best interests of children is the primary consideration
 - ✓ Improve children's' quality of life

Support for young children and families

Estonia offers **extensive and well-supported policies**, including:^{36,37}

- **Universal comprehensive health coverage** including pregnant women and children up to the age of 19
- The **longest fully paid maternity leave**: 140 days paid maternity leave/30 days paid paternity leave; and approximately 18 months of paid parental leave that can be used by either parent, one parent at a time, until the child turns three
- **Financial support**: childbirth allowance, and an ongoing monthly allowance per child enrolled in education/training
- **School readiness check-ups** prior to primary school enrolment (age 6-7); children can be referred for health or development support

ECEC delivery model

- Due to the extensive parental leave policy, children are often cared for at home until eighteen months after which local governments must provide a public childcare space³⁶
- The **integrated childcare and early education system** is under the authority of the Ministry of Education and Research and has two main structures:³⁸
 - ✓ *Lapsehoiuteenus*: childcare centres
 - ✓ *Koolieelne lasteasutus*: integrated daycare and pre-primary education institutions for children aged eighteen months to 7 years
- **Local governments have flexibility** in how they arrange ECEC programmes to meet the needs of children and families^{39,40}
- Only a small number of children are served by private providers, which charge higher fees³⁶
- **Participation rates of children under three are lower** than the European Union (EU) average, possibly due to the parental leave policy⁴⁰

³² [Country statistical profile: Estonia 2022/4 | Country statistical profiles: Key tables from OECD | OECD iLibrary \(oecd-ilibrary.org\)](#)

³³ <https://data.oecd.org/inequality/poverty-rate.htm#indicator-chart>

³⁴ <https://data.oecd.org/inequality/income-inequality.htm#indicator-chart>

³⁵ [Integrated-Early-Years-Systems.pdf \(wcpp.org.uk\)](#)

³⁶ [Estonia - NCEE](#)

³⁷ [70_CASE STUDY Estonia - Latest.pdf \(weps.org\)](#)

³⁸ [The context of early learning in Estonia | Early Learning and Child Well-being in Estonia | OECD iLibrary \(oecd-ilibrary.org\)](#)

³⁹ [Inclusive Early Childhood Education: An analysis of 32 European examples \(european-agency.org\)](#)

⁴⁰ <https://www.oecd-ilibrary.org/docserver/15009d8e->

[en.pdf?expires=1669826209&id=id&accname=ocid53026503&checksum=694E09F9A60AE7D893B05D50E10EA41B](https://www.oecd-ilibrary.org/docserver/15009d8e-en.pdf?expires=1669826209&id=id&accname=ocid53026503&checksum=694E09F9A60AE7D893B05D50E10EA41B)

- **Enrolment has increased** since amendments to the Preschool Child Care Institution Act in 2014 increased flexibility of local government provision⁴⁰
- A **priority for preschools is mitigation of language barriers for Russian-speaking children**.⁴¹
 - ✓ The Language Immersion Programme launched in 2015 in 63 preschools shows promising results
 - ✓ The Professional Estonian-speaking Teacher to Every Russian-speaking Preschool Group programme, launched in 2018, supports training Estonian teachers for 53 Russian-language groups within 21 preschools (8% of all Russian-language groups in Estonia)
 - ✓ By 2025, Estonia aims to have bilingual teaching rather than solely Russian-language groups in preschools

Funding

ECEC is publicly funded through:

- **Supply-side** funding: staff salary subsidies, place subsidies, resource grants and capital grants
- **Demand-side** funding: reduced fees, tax credits/relief and family allowances³⁸
- Estonia spent 1.16% of GDP on early education and care, higher than the OECD average (0.8%) in 2016⁴⁰
 - ✓ This may be attributed to later entry into primary education at age 7, and a longer duration of ECEC⁴²
 - ✓ Fees are capped at 20% of the national minimum wage³⁶

Impact

Estonia meets multiple quality indicators of ECEC.⁴⁰

- Although ECEC is not compulsory, 95% of children aged three to six attend preschool institutions (*Figure 2*)
- At least one staff member per group is qualified to a minimum bachelor level in education
- The ECEC curriculum covers the entire ECEC phase
- Language support measures are available, e.g., improving the language of instruction for children who speak other language(s) at home
- Provision of guidance to foster the child's learning at home for curriculum-related activities, decisions and planning

Health and development

- According to the International Survey of Children's Well-being, 76% of 8-year-old children in Estonia experience high life satisfaction, compared to 68% at age 10, and 50% at age 12³⁸
- The average 5-year-old in Estonia showed comparatively stronger early self-regulation and social-emotional skills than counterparts in England and the United States⁴⁰

⁴¹ https://www.oecd-ilibrary.org/education/early-learning-and-child-well-being-in-estonia_15009d8e-en

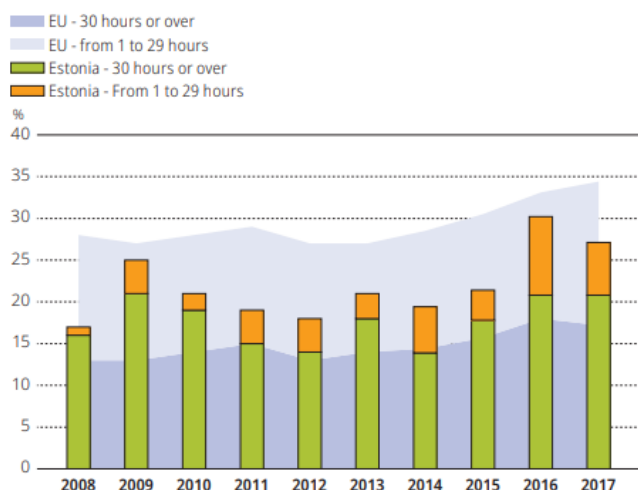
⁴² <https://www.oecd-ilibrary.org/docserver/3197152b-en.pdf?expires=1669824777&id=id&accname=quest&checksum=3642E32E0F469D6963ED28448D08C92C>

School performance

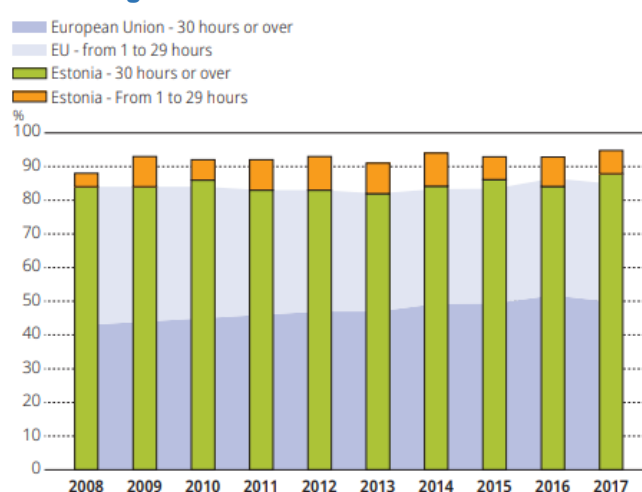
- **High participation of children** in ECEC has created a **smooth transition to school**⁴⁰
- Estonia was the **highest-performing OECD country** for reading and science in the OECD's Programme for International Student Assessment (PISA) 2018 and among the strongest across all participating countries and economies.³⁸ It was third for mathematics⁴⁰

Figure 2. Percentage of children in formal ECEC, by hours per week, 2008-2017. Source OECD⁴⁰

Children under 3



Children aged 3-6



Inequities

- **Early intervention programmes support inclusion of children** from low-income families, children with special needs, minority ethnic groups and where the home language is different to the national language⁴³
- The ECEC programme in Estonia is equitable: **parental educational attainment does not impact children's participation in ECEC**³⁸
- National policies have a **strong emphasis on providing access to ECEC in rural areas** with local governments expected to provide quality access to all children within the catchment areas⁴⁰

⁴³ [ECES-policies_and_systems-report.pdf \(iea.nl\)](#)

Denmark

Overview

- Denmark is a democratic constitutional monarchy with a population of nearly 6 million⁴⁴
- It ranks well amongst OECD countries for low income inequality and low poverty rate amongst 0-17 year olds (*Appendix 2*)^{33,34}

Support for young people and families^{45,46}

ECEC is high on the political agenda in Denmark with a long history, including:

- In 1888, it was illegal to accept money for childcare without local authority permission
- In 1997, the Equal Status Council was set up, including a working group to **increase male employees in children's care facilities**
- The Ministry of Social Affairs is responsible for the 1998 Social Services Act and has overarching responsibility for ECEC facilities
- The 1999 Social Services Act sets out requirements for day care facilities for children
- The 2007 Day Care Facilities Act gives the municipality responsibilities for ECEC, placing emphasis on **providing socially disadvantaged children with opportunities, recognising that early education reduces social inequalities**⁴⁷
- In 2022, new parental leave regulation was introduced. Financial benefits and parental leave entitlements depend on employment status and other factors⁴⁸
 - ✓ Generally, parents who live together at the time of the birth of the child are each entitled to 24 weeks of parental leave and benefits
 - ✓ Leave can be transferred between parents

ECEC delivery model^{49,50,51,52}

ECEC is guaranteed for all children between 26 weeks until school-age at 6 years:

- Children and parents must be legal residents of Denmark or EU/EEA citizens and work in Denmark to be entitled to a place
- Childcare options include day nurseries (children aged 0-3) and kindergartens (children aged 3-6)⁵³
- Private childcare may be chosen for religious or foreign language requirements
- **Educators holding a university degree are the lead personnel** in all day care facilities, supported by assistants.
- They account for 60% of staff - the highest rate of professionals of all the Nordic countries⁵⁴

Denmark's ECEC system aims to facilitate a **coherent and meaningful transition into school from birth**, with an emphasis on **developing children's self-esteem, desire to learn, well-being and independence:**

⁴⁴ https://european-union.europa.eu/principles-countries-history/country-profiles/denmark_en

⁴⁵ <https://www.oecd.org/education/school/2475168.pdf>

⁴⁶ [Gender Equality - An incomplete success \(denmark.dk\)](https://www.oecd.org/education/school/2475168.pdf)

⁴⁷ <https://www.sciencedirect.com/science/article/pii/S0883035513000670>

⁴⁸ <https://lifeindenmark.borger.dk/family-and-children/family-benefits/maternity-paternity-benefits>

⁴⁹ <https://eng.uvm.dk/early-childhood-education-and-care-system/introduction-to-the-early-childhood-education-and-care-system>

⁵⁰ <https://ec.europa.eu/social/main.jsp?catId=1107&langId=en&intPageId=4486>

⁵¹ [Early Childhood Education and Care \(ECEC\) in Denmark - Education - Oxford Bibliographies](https://www.oecd.org/education/school/2475168.pdf)

⁵² <https://www.oecd.org/education/school/2475168.pdf>

⁵³ <https://lifeindenmark.borger.dk/family-and-children/day-care/childcare-facilities-for-young-children>

⁵⁴ [Education GPS - Denmark - Overview of the education system \(EAG 2022\) \(oecd.org\)](https://www.oecd.org/education/school/2475168.pdf)

- **Children’s play is a central part** of Denmark’s childcare provision, with free-play to encourage and understand social order and solve differences through negotiation^{55,56}
- Outdoor play and nature are valued, with pre-school children spending most of their time outdoors
- Children are mostly free to choose for themselves what to play and with whom to play with in a **child-centred pedagogical environment**⁵¹

Funding^{57,58}

ECEC is financed by both the municipality and parents through income-based subsidies.

- In 2022, total pre-tax annual household incomes thresholds for subsidies are:
 - ✓ Up to 187,900 Danish Krone (DKK) (approximately £21,759⁵⁹): cost is covered in full by the municipality
 - ✓ 187,901-583,699 DKK: childcare is partially subsidised
 - ✓ Over 583,700 DKK (approximately £67,592): parents pay the full costs
 - ✓ The income threshold is raised by 7,000 DKK per additional child, and by 65,747 DKK for single parents

In addition to this allowance:

- Families with children who have significant physical or mental health conditions are entitled to a therapeutic allowance which halves the cost of childcare
- Parents may use the allowance for private schooling facilities at the discretion of the municipality

During austerity measures, funding streams for ECEC were changed.⁶⁰

- Lump sums were reduced, with local authorities implementing savings in 2008 by closing/merging ECEC centres, increasing fees, and reducing staff
- The proportion of GDP spent on ECEC decreased from 1.7% in 2009 to 1.2% in 2019
- Parents’ contributions are capped to a maximum of 25% of total costs

Impact

- In 2020, 97% of 3-5 year-olds in Denmark were enrolled in ECEC programmes, higher than the average across OECD countries (83%); the share of children enrolled in private institutions at pre-primary level was 22%⁶⁰
- An evaluation of a pre-school programme which focussed on staff reflection on current practices, demonstrated that children developed **fewer emotional symptoms, conduct problems, became less hyperactive and were more attentive**⁴⁷
- Effect sizes were larger amongst children of well-educated mothers compared with low-educated mothers (contrary to the intended effect)
- **Denmark has high-rates of female employment and children placed in ECEC facilities**, similar to that of Sweden (*Figure 3*)^{46,54,61}

⁵⁵ [The Role of Play in Danish Child Care | SpringerLink](#)

⁵⁶ [Outdoor Education in the Nordic Region | SpringerLink](#)

⁵⁷ [Childcare facilities for young children \(borger.dk\)](#)

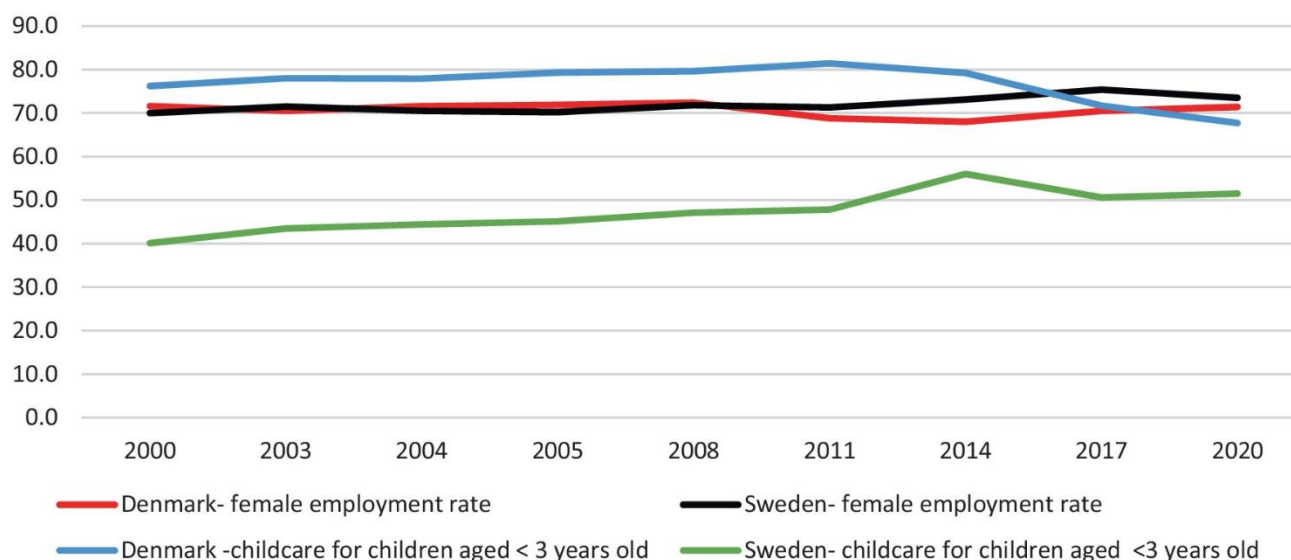
⁵⁸ [Cost of childcare | International.kk.dk](#)

⁵⁹ Conversion rate DKK 1 = 0.12 GBP on 05.12.2022

⁶⁰ <https://onlinelibrary.wiley.com/doi/full/10.1111/rego.12492>

⁶¹ <https://www.oecd-ilibrary.org/sites/66a73189-en/index.html?itemId=/content/component/66a73189-en>

Figure 3. High rates of female employment and children in ECEC in Denmark and Sweden.
Source OECD⁶¹



Sweden

Overview

- Sweden is a democratic constitutional monarchy with a population of 10.5 million⁶²
- It ranks highly for its low income inequality and low child poverty rates (*Appendix 2*)^{33,34}
- Sweden allocates 32.1% of its 627.4 billion USD⁶³ GDP for welfare and social care⁶⁴
- 3.4% of GDP is spent on family benefits and **1.1% is targeted towards childcare for children under 3**⁶⁵
- It places **value on equality and progress** within its highly developed social welfare system⁶⁶
 - ✓ Evidenced through one of the lowest infant mortality rates in the world⁶⁷
 - ✓ ECEC considered a fundamental component of a welfare state⁶⁸

ECEC delivery model⁶⁹

Sweden has a fully integrated early year's childcare system for children aged 1-6:

- Parental leave encompasses a total allowance of 480 days (16 months) per child, which can be split between parents, so there are **no gaps between the end of parental leave and provision of subsidised care**
- Early years childcare is available as:
 - ✓ Preschool (förskola)

⁶² https://datacommons.org/place/country/SWE?utm_medium=explore&mprop=count&popt=Person&hl=en

⁶³ <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=SE>

⁶⁴ <https://gpseducation.oecd.org/CountryProfile?primaryCountry=SWE&treshold=10&topic=EO>

⁶⁵ <https://www.oecd.org/els/family/database.htm>

⁶⁶ <https://ijcecp.springeropen.com/articles/10.1007/2288-6729-3-1-1>

⁶⁷ <https://worldpopulationreview.com/country-rankings/infant-mortality-rate-by-country>

⁶⁸ <https://www.tandfonline.com/doi/full/10.1080/03057925.2022.2092451>

⁶⁹ https://www.dji.de/fileadmin/user_upload/icec/Expertisen/WEB_DJI_Report_Sweden.pdf

- ✓ Pedagogical care (pedagogisk verksamhet)
- Municipalities play a central role in the planning, implementation, and delivery of ECEC⁷⁰
- The **Ministry of Education and Research has overarching responsibility**⁶⁸
- Preschools are open throughout the year⁷¹
 - ✓ **Evening and night preschools available for parents who work night shifts**
 - ✓ In 2016 almost 95% of children aged 4-5 years attended preschools⁷²
- Classes in the last year of pre-school supports transition into primary school
- 95% of six-year-olds attend, usually lasting three hours/day⁷³

Preschool takes a holistic approach focusing on children's needs, with aims to:⁷⁴

- Lay foundations for life-long learning
- Encourage children to become active, creative, responsible members of society
- Play is considered the foundation of development, learning and well-being

A curriculum has been introduced, suggesting **a change in ideology from care and play towards learning**.^{68,75}

- Learning and care are intrinsically linked: care facilitates social well-being, which in turn enables development
- The curriculum contains core values including respect for human rights, gender equality and respect for the environment

Funding

ECEC is funded predominantly by the state, with low parental contributions:^{68,70}

- The municipality covers 90% of preschool costs
- Although this is expensive, preschools enable parents to work, thereby increasing tax revenue
- To ensure equity, Sweden utilises a **tax equalisation system where wealthier municipalities subsidise poorer areas**
- Private preschools / kindergartens are also available

Subsidies available for preschool depend on:⁷¹

- Parent(s) who are working, looking for work, at home with a child's younger sibling, or studying are entitled to childcare
- The family must be registered in the municipality
- Parents on parental leave or unemployed are eligible for 3 hours per day/15 hours per week preschool (some municipalities offer more)

There is a **maximum charge for the amount parents pay for childcare** in a day care ("maxtaxa") since 2002⁷¹

- This led to a 15% **increase in preschool attendance** for all groups but **particularly migrant families**^{76,77}
- On average, 4.4% of net household income is spent on childcare
- Caps exist for monthly costs. In 2020, these were:⁷⁸

⁷⁰ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2807813/#:~:po=67.6471>

⁷¹ <https://www.norden.org/en/info-norden/childcare-sweden>

⁷² <https://www.government.se/government-agencies/the-swedish-national-agency-for-education-statens-skolverk/>

⁷³ <https://www.oecd.org/education/innovation-education/35892546.pdf>

⁷⁴ <https://www.skolverket.se/getFile?file=4049>

⁷⁵ <https://www.gov.scot/publications/early-childhood-education-care-provision-international-review-policy-delivery-funding/pages/7/>

⁷⁶ <https://link.springer.com/article/10.1007/s10797-007-9030-3>

⁷⁷ https://www.dji.de/fileadmin/user_upload/icec/Expertisen/WEB_DJI_Report_Sweden.pdf

⁷⁸ <https://senedd.wales/media/1xhnsa5p/cr-ld14896-e.pdf>

- ✓ 3% of monthly household income for the first child (maximum 1,478 Swedish Krona (SEK), approximately £130 per month)
- ✓ 2% for the second child (maximum SEK 986)
- ✓ 1% for the third child (maximum SEK 493)
- ✓ Free for fourth and subsequent children

Impact

Gender equity

The 1975 Act (and 1984 Bill) legislated for **ECEC expansion to facilitate women's participation in the labour market**, as well as **promote social equality and children's development and welfare**, establishing:^{68,78}

- ECEC as a fundamental right for children as well as parents
- “System change” achieved through parental leave and EYCC policies

Female labour force participation is also supported by parental leave policies:

- Two months of parental leave is non-transferable, thus encouraging both parents to care for the child
- A gender equality bonus was introduced in 2008 and only payable when both parents take leave⁷⁹

Preschool childcare for unemployed parents has increased the number of women in paid employment (in particular, women with 2+ children)⁷⁸

- Nearly three-quarters of women aged 15-64 are in employment, higher than most European countries⁷⁸ (*Figure 3*)
- 4.1% difference between men and women's participation in the labour force; unemployment difference is 0.5%⁸⁰
- Women are still more likely to work part time; gender segregation is ongoing in terms of occupation types⁷⁸

Health⁸¹

- **Improved access to day care** through the introduction of “*maxtaxa*” **increased attendance from approximately 70% to 85%**.
- Health outcomes between 1999-2008 in the county of Skåne were investigated following the *maxtaxa* introduction:
 - ✓ **Reduction in developmental and behavioural problems** (such as language delay and ADHD respectively), with the greatest impact at age 4-5
 - ✓ **Increased diagnosis of ear infections and respiratory problems** at age 2-3. This association disappears at age 6-7, and reduce in primary school, supporting the hygiene hypothesis
 - ✓ **The greatest impact was seen in children of lower socio-economic status**

⁷⁹ <https://www.ifau.se/en/Press/Abstracts/reducing-the-gender-gap-in-parental-leave-through-economic-incentives--evidence-from-the-gender-equality-bonus-in-sweden/>

⁸⁰ https://stats.oecd.org/Index.aspx?DataSetCode=LFS_SEXAGE_I_R

⁸¹ <https://www.sciencedirect.com/science/article/pii/S0167629621001624#sec0005>

Republic of Chile

Overview

- Chile is a republic with a population of more than 19 million⁸²
- It has **significant inequalities and relatively high rates of poverty for 0-17 year olds** (Appendix 2)^{33,34,83}
- In 2005, **30% of Chilean children under five years did not reach their expected development milestones**, with the **poorest quintile at highest risk of developmental delay**
- **Substantial progress has been made recently** with a reduction in infant, child and maternal mortality as the government is **prioritising policies supporting child development**.⁸⁴

Chile Crece Contigo

Chile Crece Contigo (ChCC) (“*Chile Grows with You*”) is a social protection programme launched in 2007 to **support early year’s development of children under five**. The programme:

- Is **integrated**, bringing together education, health, social and community services⁸³
- **Tracks each child’s development trajectory** starting during pregnancy until formal schooling (age 4-5)⁸⁵
- Offers **universally accessible services** to all children, with **specialised services for the most vulnerable households** (*Figure 4*)
- In addition to childcare and child development services, ChCC **offers**:
 - ✓ Prenatal and maternity care; parenting skill workshops
 - ✓ Food for children and pregnant/breast feeding mothers
 - ✓ Economic support through family subsidies and family allowances
 - ✓ Health services including child mental health and immunisation

ChCC has **dedicated services for disabled children and their families**:⁸⁶

- Technical and Technological Assistance Financing Program: **promotes social inclusion** through access to mobility aids, visual aids, prosthetics, and rehabilitation
- Family subsidy scheme: conditional monetary grants to contribute to **household economic well-being**
- Financial supplements for each child integrated into regular state school education: **encourages inclusion** of students with developmental disabilities

⁸² [Chile - Place Explorer - Data Commons](#)

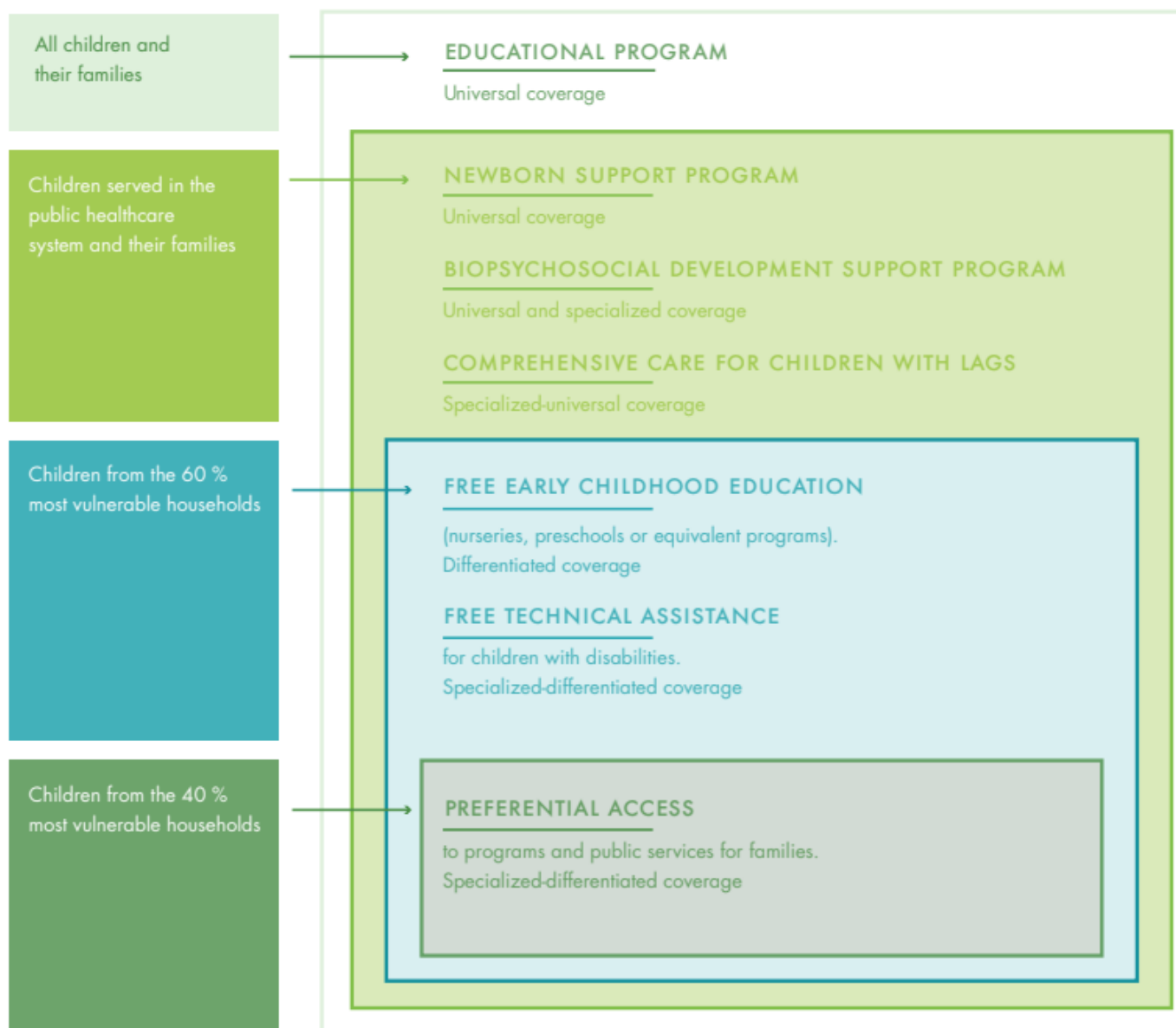
⁸³ [Chile Crece Contigo \(CCC\): supporting early years development | Centre For Public Impact \(CPI\)](#)

⁸⁴ [Scaling up an early childhood development programme through a national multisectoral approach to social protection: lessons from Chile Crece Contigo \(bmi.com\)](#)

⁸⁵ [Microsoft PowerPoint - CHCC - ECD COP march 2018.pptx \(worldbank.org\)](#)

⁸⁶ [Frontiers | Early Childhood Development policy in Chile: Progress and pitfalls supporting children with developmental disabilities toward school readiness \(frontiersin.org\)](#)

Figure 4. Chile Crece Contigo service map. Source: World Bank⁸⁷



Governance and funding

- The **Ministries of Health, Education, and Social Development share responsibility** for administration and management of the ChCC programme
- The Ministry of Social Development is responsible for coordinating and managing the system at national, regional, and communal levels⁸⁷
- The programme is **entirely financed by the public sector**, with agreements in place for governing the transfer of funds to sectoral ministries, local municipalities, and private stakeholders⁸⁴
- **Funding has steadily increased** in total value (*Table 5*),⁸³ and also as a share of GDP (*Appendix 2*)

⁸⁷ <https://documents1.worldbank.org/curated/en/992351537159031673/pdf/129940-WP-PUBLIC-Chile-Crece-Contigo-10-a%C3%B1os-FINAL-July-2018.pdf>

Impact

A 10-year evaluation of ChCC was recently conducted, with encouraging results for ECEC as well as prenatal, delivery, and early postpartum care (*Table 5*).

- Nearly one million pregnant women registered with ChCC between 2007-2014⁸⁸
- Programme participation:⁸⁹
 - ✓ **Increased babies' birthweight** by an average 10 grams
 - ✓ **Increased foetal survival**
 - ✓ **Benefits** were largest amongst the **most socially vulnerable** groups
 - ✓ A **reduction in developmental delay rates** (from 25% in 2006 to 11% in 2017) has been attributed to ChCC⁸⁴

Table 5. Selected progress indicators of ChCC programme⁸⁴

Indicator	2006-2010	2011-2014	2015-2018
Total public expenditure (\$m)	7,809	72,715	80,989
Home visits: children with psychomotor delay (total number)	2,754	41,001	46,033
Parents attending motor and language development workshops (% of parents with children <1 year)	0	-	63
Routine health visits for children 0-4 years attended by father (% of health visits)	14	16	19
Preschool education 0-3 years (% of children attending)	12	26	29
Preschool education 4-5 years (% of children attending)	63	83	90

Data from: Ministries of Health, Education, Social Development, Finance, Chile.

⁸⁸ <https://www.centreforpublicimpact.org/case-study/chile-crece-contigo>

⁸⁹ [Growing Together: Assessing Equity and Efficiency in an Early-Life Health Program in Chile \(iza.org\)](#)

Appendix 1. National childcare policy league table. Source: UNICEF⁹⁰

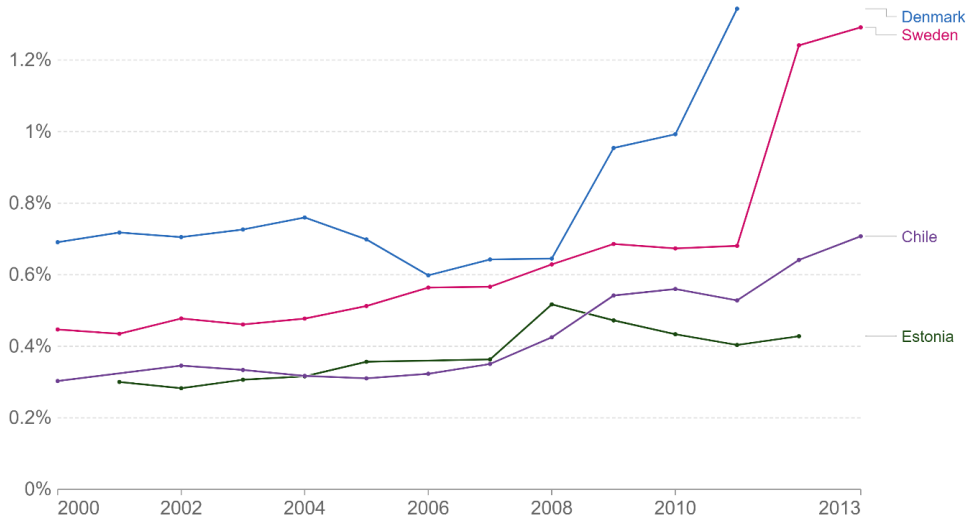
Rank	Country	Leave	Access	Quality	Affordability
1	Luxembourg	5	3	13	16
2	Iceland	19	5	1	15
3	Sweden	9	4	17	10
4	Norway	6	12	20	8
5	Germany	13	21	9	4
6	Portugal	12	15	10	12
7	Latvia	16	24	2	7
8	Denmark	27	2	5	17
9	Republic of Korea	4	10	26	14
10	Estonia	3	32	17	8
11	Finland	15	19	4	24
12	Lithuania	7	25	11	22
13	Austria	10	23	27	6
14	Malta	32	17		1
15	Italy	28	28	14	1
16	Greece	29	26	6	11
17	Slovenia	14	20	8	32
18	Belgium	26	8	21	23
19	France	22	7	24	25
20	Spain	25	11	23	19
21	Japan	1	31	22	26
22	Canada	23	16		21
23	Croatia	17	30		13
24	Hungary	11	36	16	20
25	Chile	24	29	29	1
26	Bulgaria	8	38		18
27	Poland	21	33	7	27
28	Netherlands	31	1	28	30
29	Romania	2	39		27
30	Mexico	33	9	31	
31	Israel	34	6	32	31
32	Czechia	20	37	19	29
33	New Zealand	39	27	3	36
34	Turkey	35	41	30	5
35	United Kingdom	36	13		35
36	Ireland	38	14		33
37	Australia	37	34	12	34
38	Switzerland	40	18	25	37
39	Cyprus	30	22		39
40	United States	41	35	15	38
41	Slovakia	18	40	33	40

⁹⁰ [where-do-rich-countries-stand-on-childcare.pdf \(unicef-irc.org\)](https://www.unicef-irc.org/publications/where-do-rich-countries-stand-on-childcare.pdf)

Appendix 2.

Government expenditure on pre-primary education as a share of GDP 2000-2013. Source UNESCO⁹¹

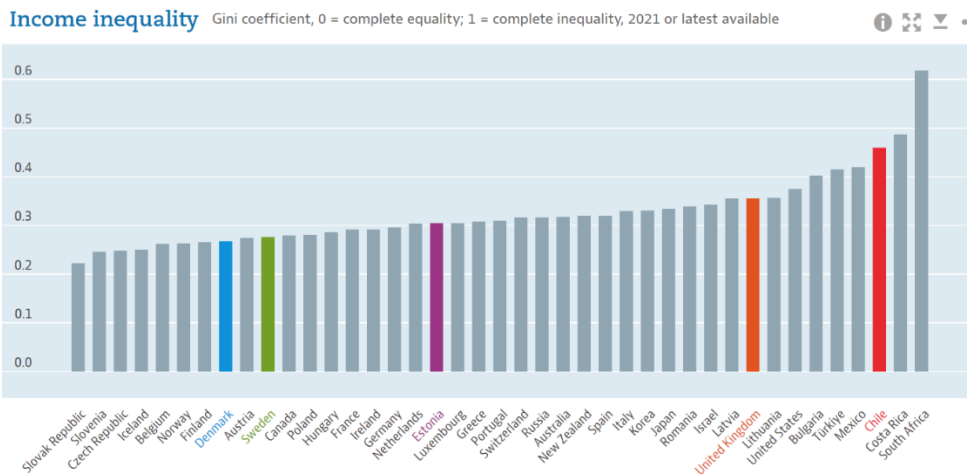
Total general (local, regional and central) government expenditure on pre-primary education (current, capital, and transfers), expressed as a percentage of GDP. It includes expenditure funded by transfers from international sources to government.



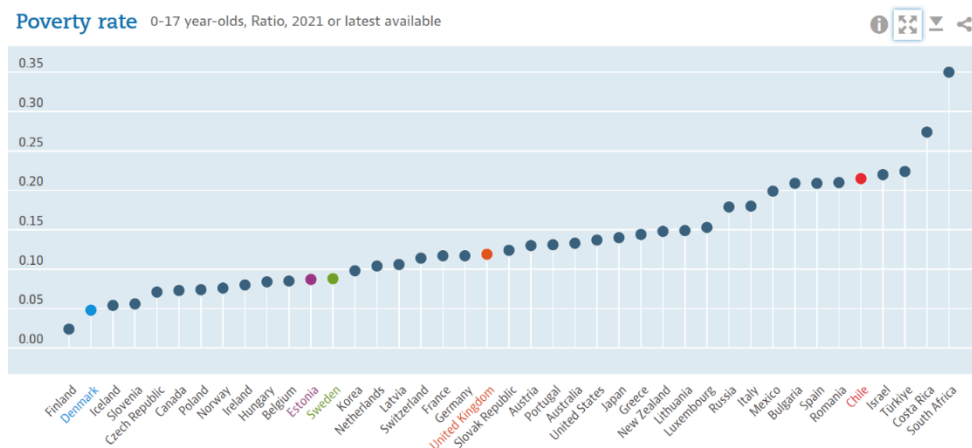
Source: UNESCO Institute for Statistics

OurWorldInData.org/financing-education • CC BY

Income inequality (Gini coefficient); countries included as case studies highlighted. Source OECD³⁴



Poverty rate amongst 0-17 year olds; countries included as case studies highlighted. Source OECD³³



⁹¹ <https://ourworldindata.org/grapher/government-expenditure-on-pre-primary-education-as-share-of-gdp?tab=chart®ion=Europe>

The International Horizon Scanning and Learning reports are developed by the International Health Team / the International Health Coordination Centre (IHCC) at the WHO Collaborating Centre on Investment for Health and Well-being (WHO CC), Public Health Wales.

Acting National Director of Policy and International Health, WHO CC: Sumina Azam

International health lead and WHO CC Deputy Director: Mariana Dyakova

Authors and contributors: Abigail Malcolm, Leah Silva, Lauren Couzens, Golibe Ezenwugo, Sara Cooklin Urbano, Emily Clark, Mariana Dyakova

Contacts: Emily.Clark4@wales.nhs.uk; Mariana.Dyakova@wales.nhs.uk

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