

TALIS

Results from TALIS Starting Strong 2024

Strengthening Early Childhood Education and Care



TALIS

Results from TALIS Starting Strong 2024

STRENGTHENING EARLY
CHILDHOOD EDUCATION AND CARE

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Member countries of the OECD.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Please cite this publication as:

OECD (2025), *Results from TALIS Starting Strong 2024: Strengthening Early Childhood Education and Care*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/20af08c0-en>.

ISBN 978-92-64-95113-6 (print)
ISBN 978-92-64-50319-9 (PDF)
ISBN 978-92-64-88087-0 (HTML)

TALIS
ISSN 2312-962X (print)
ISSN 2312-9638 (online)

Photo credits: Cover © bbernard/Shutterstock.com.

Corrigenda to OECD publications may be found at: <https://www.oecd.org/en/publications/support/corrigenda.html>.

© OECD 2025



Attribution 4.0 International (CC BY 4.0)

This work is made available under the Creative Commons Attribution 4.0 International licence. By using this work, you accept to be bound by the terms of this licence (<https://creativecommons.org/licenses/by/4.0/>).

Attribution – you must cite the work.

Translations – you must cite the original work, identify changes to the original and add the following text: *In the event of any discrepancy between the original work and the translation, only the text of the original work should be considered valid.*

Adaptations – you must cite the original work and add the following text: *This is an adaptation of an original work by the OECD. The opinions expressed and arguments employed in this adaptation should not be reported as representing the official views of the OECD or of its Member countries.*

Third-party material – the licence does not apply to third-party material in the work. If using such material, you are responsible for obtaining permission from the third party and for any claims of infringement.

You must not use the OECD logo, visual identity or cover image without express permission or suggest the OECD endorses your use of the work.

Any dispute arising under this licence shall be settled by arbitration in accordance with the Permanent Court of Arbitration (PCA) Arbitration Rules 2012. The seat of arbitration shall be Paris (France). The number of arbitrators shall be one.

Preface

Early childhood education and care (ECEC) is central to a child's development. Governments increasingly recognise its long-term benefits, including its role in laying the foundations for lifelong learning and social cohesion. But the workforce that make this possible is under strain. As demand for high-quality services rises, ensuring the sustainability and attractiveness of the profession has become an urgent priority for many countries.

By assessing the issues that impact ECEC systems, the OECD helps countries understand whether children are receiving the strong foundations they need to succeed in school and beyond. The second round of the Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) reveals insights into the state of the profession, its strengths and the challenges the sector faces. The data show that supporting social and emotional development is very common across systems, but the intentional support of literacy and numeracy development tends to be less frequent. Children in high-quality ECEC settings – where staff build positive relationships and provide strong learning opportunities - have higher levels of emerging literacy and numeracy skills, and stronger social skills. According to the survey, staff place the greatest emphasis on helping children communicate, co-operate with others and manage their emotions. These foundations not only prepare children for academic success as they progress through education but also help build societies where individuals engage with one another and can work together to address shared challenges.

Encouragingly, while the ECEC workforce often face difficult working conditions, nine out of ten staff report high job satisfaction and a strong commitment to improving the lives of children. In all systems, a large majority of staff say they would choose to work in the sector again if given the chance. This dedication is vital, as young children learn and develop rapidly through the people around them. When schools and teachers ask how to support students' social and emotional skills and well-being, ECEC staff remind us that these foundations are at the heart of their roles.

The vital work of the ECEC profession is recognised by families themselves: over 90% of staff in most countries and subnational entities feel valued by parents and children. This strong sense of appreciation reflects the trust and respect placed in ECEC staff. However, the picture changes when looking at broader societal recognition, with ECEC staff feeling less valued by society. This perception of lower social recognition is disappointing, but ECEC staff still feel more valued by society than staff working in other levels of education.

Despite the critical importance of ECEC work, staff shortages are a widespread problem. The lack of personnel impacts stress levels as staff must take on additional responsibilities, as well as limiting opportunities for ongoing professional development. Collaboration, which enhances the quality of ECEC work, also suffers as it requires dedicated time for teams to come together. These findings highlight the need for policies that proactively generate interest in the ECEC profession to meet growing demand from families and governments, and ensure all children can have access to high-quality ECEC.

The voices of the staff and leaders who participated in TALIS Starting Strong remind us of the challenges facing the sector, as well as the tremendous potential of ECEC professionals to support children and their

families. Staff know they are valued by the children and the families they serve on a daily basis; now it is time to amplify their voices and recognise that their work is truly invaluable.

Andreas Schleicher,

Director for Education and Skills,

Special Advisor on Education Policy to the OECD Secretary-General



Foreword

Early childhood education and care (ECEC) has the potential to address a range of goals, yet delivering on the potential of ECEC requires a workforce that is equipped and motivated to meet the unique demands of facilitating young children’s development, learning and well-being. The OECD Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) is a large-scale survey of staff and leaders in early childhood education and care (ECEC) settings. It was first introduced in 2018 and administered again in 2024. TALIS Starting Strong builds on the OECD’s 25 years of experience in conducting ECEC policy reviews in the context of the *Starting Strong* series and the broader TALIS programme that collects data from school principals and teachers. By collecting internationally comparable information from ECEC staff and leaders, TALIS Starting Strong ensures that their voices are represented in policymaking.

This report presents the results of the survey, looking at the activities and supports for children and their families through ECEC, as well as the aspects of working in ECEC that staff appreciate, their opportunities for career progression and sources of work-related stress. The governance, oversight and structure of job opportunities in the sector are also considered. Taking a forward-looking approach, the TALIS Starting Strong 2024 data are used to inform strategies for strengthening ECEC systems in the face of shifting demands on the sector and short-term crises, better equipping these systems to realise the benefits of ECEC for the future.

The development of this report was possible thanks to all of the early childhood education and care staff and leaders who gave their time to participate in TALIS Starting Strong 2024.

Andreas Schleicher and Yuri Belfali guided the development of the report, which was led by Stéphanie Jamet and Elizabeth Shuey. Chapters were authored by Gemma Coleman (Chapters 4 and 5), Carlos González-Sancho (Chapter 9), Stéphanie Jamet (Chapters 1, 3 and 8), Pinar Kolancali (Chapter 7), Andreea Minea-Pic (Chapter 6), Judit Pál (Chapter 3), Miguel Angel Quintero Lopez (Chapter 2) and Elizabeth Shuey (Chapters 1, 4 and 5). Statistical analyses and outputs were led by Judit Pál and Miguel Angel Quintero Lopez with assistance from Gemma Coleman and Sarah Grant, support from Gabor Fülöp, Rodolfo Ilizaliturri and François Keslair and co-ordination by Elizabeth Shuey. Andreea Minea-Pic and Mauricio Salazar-Lozada led the development of the participant notes. The team is grateful to Esther Ferreira Dos Santos for her valuable feedback.

Anna Machnio supported report preparation, production and project co-ordination. The main editor of the report was Jennifer Allain (external). Duncan Crawford and Rachel Linden provided editorial and communications support. Graphic design support was provided by Della Shin and additional communications support was provided by Kevin Gillespie.

TALIS Starting Strong 2024 is the outcome of a collaboration among the participating countries and subnational entities, the OECD Secretariat and the International Association for the Evaluation of Educational Achievement (IEA) with its international consortium partners cApStAn and RAND Europe AISBL. The development of the report was steered by the Informal Group on TALIS Starting Strong of the TALIS Governing Board, chaired by Bernhard Kalicki (Germany). The authors wish to thank this group as well as National Project Managers and their teams in participating countries and subnational entities, the

Questionnaire Expert Group and the Technical Advisory Group who all provided valuable feedback and input at various stages of the data and report production. In addition, the technical implementation of TALIS Starting Strong was contracted out to an international consortium of institutions and experts co-directed by Steffen Knoll and Anja Waschk with Ralph Carstens providing senior counsel. Annex E of this volume lists the members of various TALIS Starting Strong bodies, as well as the experts who contributed to TALIS Starting Strong.

Table of contents

Preface	3
Foreword	5
What is TALIS Starting Strong?	13
Reader's Guide	14
References	23
Executive Summary	24
1 Strengthening early childhood education and care: Overview of results from TALIS Starting Strong 2024	28
Strong early childhood education and care for children and families	30
Strong early childhood education and care to attract and retain a high-quality workforce	35
Strong foundations for early childhood education and care	39
References	43
2 Building a strong early childhood education and care workforce	44
Understanding demographic profiles and staff roles in early childhood education and care settings	47
Preparing a strong workforce: Initial education and training of staff and leaders in early childhood education and care	51
Mapping career stages: Work experience of ECEC staff and leaders	55
Employment conditions of early childhood education and care staff	58
Policy pointers	61
References	62
3 Structural features of high-quality early childhood and education care	65
Managing and funding early childhood education and care settings	69
Describing early childhood education and care settings' geographical location and physical features	73
Understanding the size, staffing and organisation of activities of early childhood education and care settings	76
Early childhood education and care settings through the lens of children's characteristics and staffing stability	81
Policy pointers	89
References	90

4 Staff practices with children and time use in early childhood education and care settings	93
Balancing staff time to support quality practices	95
Supporting children's early development	100
Responding to the interests and needs of individual children	108
Supporting rich interactions and experiences in early childhood education and care settings	113
Policy pointers	116
References	117
5 Building awareness and acceptance of diversity in early childhood education and care settings through staff practices and engagement with families	119
Building awareness and acceptance of diversity in early childhood education and care	122
Responding to growing linguistic diversity in early childhood education and care	125
Engaging with parents and families in early childhood education and care	128
Policy pointers	133
References	134
6 Developing early childhood education and care staff expertise	136
Building on initial education through ongoing training	139
Identifying and addressing barriers to professional development	146
Supporting novice staff to adapt to their roles in early childhood education and care	153
Empowering staff to feel confident in their work in early childhood education and care	154
Policy pointers	158
References	159
7 Developing leadership in early childhood education and care settings	161
Engaging leaders in continuous professional development	164
Balancing leaders' autonomy in decision making and their needs for support	169
Promoting distributed leadership practices	173
Cultivating pedagogical and strategic leadership practices to support early childhood education and care quality	176
Policy pointers	179
References	180
8 Retaining early childhood education and care staff	182
Raising the attractiveness of the early childhood education and care profession	185
Understanding the level and sources of stress in early childhood education and care settings	192
Retaining staff through improved working conditions	196
Balancing job demand and resources to mitigate stress	200
Policy pointers	203
References	204
9 Looking forward: Preparedness for change in early childhood education and care	206
Promoting collaboration and learning with others	209
Steering change through monitoring practices	215
Preparing for digital innovation	219
Reducing stress from unexpected disruptions	223
Policy pointers	227
References	228

Annex A. Profiles of early childhood education and care systems	231
References	279
Annex B. Technical notes on sampling, response rates and adjudication	280
References	286
Annex C. Technical notes on analyses in this report	287
Reference	299
Annex D. List of tables available online	300
Annex E. List of TALIS Starting Strong 2024 contributors	308

FIGURES

Figure 1.1. Framework for analysis of strong early childhood education and care systems	30
Figure 2.1. Analytical framework for building a strong early childhood and education care workforce	46
Figure 2.2. Staff roles in early childhood education and care settings	48
Figure 2.3. Age and gender of early childhood education and care staff and leaders	49
Figure 2.4. Early childhood education and care staff's educational attainment and content of their initial training	52
Figure 2.5. Early childhood education and care leaders' educational attainment and content of their training	54
Figure 2.6. Years of experience as early childhood education and care staff	56
Figure 2.7. Leaders' years of experience in early childhood education and care	58
Figure 2.8. Staff working hours and contractual status in early childhood education and care	59
Figure 3.1. Analytical framework for analysing structural features of high-quality early childhood and education care	68
Figure 3.2. Early childhood education and care settings' type of management and profit status	70
Figure 3.3. Early childhood education and care settings' sources of funding	71
Figure 3.4. Private and public sources of funding to privately and publicly managed early childhood education and care settings	72
Figure 3.5. Size of early childhood education and care settings	78
Figure 3.6. Number of staff per ten children in early childhood education and care settings	79
Figure 3.7. Organisation of the work with children in early childhood education and care settings	81
Figure 3.8. Concentration of vulnerable children in early childhood education and care settings	83
Figure 3.9. Staff turnover and absences in early childhood education and care settings	87
Figure 3.10. Unmet demand in early childhood education and care settings	89
Figure 4.1. Analytical framework for strengthening practices to support children's development in early childhood education and care	95
Figure 4.2. Total staff time spent on work-related tasks and in direct contact with children in early childhood education and care	97
Figure 4.3. Association between staff time spent documenting children's development, well-being and learning and practices with children	114
Figure 5.1. Analytical framework for building awareness and acceptance of diversity in early childhood education and care settings through staff practices and engagement with families	121
Figure 5.2. Representation of diversity in books and pictures in early childhood education and care settings	123
Figure 5.3. Association between staff self-efficacy and practices to promote awareness and acceptance of diversity in early childhood education and care settings	124
Figure 5.4. Staff spending priorities in the early childhood education and care sector	128
Figure 6.1. Analytical framework for developing early childhood education and care expertise	139
Figure 6.2. Content of initial education or training programmes for early childhood education and care staff	140
Figure 6.3. Professional development activities for early childhood education and care staff	142
Figure 6.4. Perceived impact of professional development participation, by participation mode in courses/seminars/workshops	146

Figure 6.5. Support for early childhood education and care staff's participation in professional development activities	150
Figure 6.6. Associations between types of support for professional development participation and staff participation in job-embedded training and collaborative learning for staff in early childhood education and care	152
Figure 7.1. Analytical framework for building strong early childhood education and care by strengthening leadership	164
Figure 7.2. Type of professional development activities attended by leaders of early childhood education and care settings	166
Figure 7.3. Distribution of responsibilities for financial and pedagogical tasks	171
Figure 7.4. Staff's and parents' engagement in early childhood education and care setting decisions	174
Figure 7.5. Association between distributed leadership practices and staff satisfaction with setting leadership	176
Figure 7.6. Early childhood education and care setting leaders' engagement in different leadership activities	178
Figure 8.1. Analytical framework for building strong early childhood education and care by attracting and retaining staff in the sector	185
Figure 8.2. Early childhood education and care staff's feeling of being valued by society and by parents or guardians	188
Figure 8.3. Satisfaction with the job and work at early childhood education and care settings	189
Figure 8.4. Early childhood education and care staff satisfaction with salary and level of autonomy	190
Figure 8.5. Work stress and impact on personal life for staff in early childhood education and care settings	194
Figure 8.6. Associations between staff's levels of stress and the main sources of stress	196
Figure 8.7. Associations between levels of stress and the likelihood of considering leaving the staff role for physical and mental health issues	199
Figure 9.1. Analytical framework for preparedness for change to strengthen early childhood education and care	209
Figure 9.2. Teachers' and assistants' engagement in collaborative practices in early childhood education and care settings	213
Figure 9.3. Association between leadership practices and staff collaboration in early childhood education and care settings	215
Figure 9.4. Staff training for using digital resources and tools to facilitate working with children	221
Figure 9.5. System-level association between staff self-efficacy for using digital resources in their work with children and cumulative training in this area	222
Figure 9.6. Associations between satisfaction with leadership and engagement in collaboration and staff stress from unexpected disruptions in early childhood education and care settings	225
Figure A A.1. Organisation of the early childhood education and care system in Chile	232
Figure A A.2. Organisation of the early childhood education and care system in Colombia	235
Figure A A.3. Organisation of the early childhood education and care system in Denmark	238
Figure A A.4. Organisation of the early childhood education and care system in Finland	240
Figure A A.5. Organisation of the early childhood education and care system in the Flemish Community of Belgium	243
Figure A A.6. Organisation of the early childhood education and care system in Germany	246
Figure A A.7. Organisation of the early childhood education and care system in Ireland	249
Figure A A.8. Organisation of the early childhood education and care system in Israel	251
Figure A A.9. Organisation of the early childhood education and care system in Japan	253
Figure A A.10. Organisation of the early childhood education and care system in Morocco	256
Figure A A.11. Organisation of the early childhood education and care system in New Brunswick (Canada)	259
Figure A A.12. Organisation of the early childhood education and care system in New Zealand	262
Figure A A.13. Organisation of the early childhood education and care system in Norway	265
Figure A A.14. Organisation of the early childhood education and care system in Quebec (Canada)	267
Figure A A.15. Organisation of the early childhood education and care system in Spain	270
Figure A A.16. Organisation of the early childhood education and care system in Sweden	272
Figure A A.17. Organisation of the early childhood education and care system in Türkiye	274

TABLES

Table 1. Types of early childhood education and care settings for children under age 3 and their staff in TALIS Starting Strong 2024	17
Table 2. Early childhood education and care staff roles in the TALIS Starting Strong 2024 questionnaire	18
Table 3. Use of different questionnaire types in TALIS Starting Strong 2024	19
Table 1.1. Data overview: Strong early childhood education and care for children and families	34
Table 1.2. Data overview: Strong early childhood education and care to attract and retain a high-quality workforce	38
Table 1.3. Data overview: Strong foundations for early childhood education and care	42
Table 3.1. Differences in geographical and physical characteristics of early childhood education and care settings between privately and publicly managed settings	75
Table 3.2. Differences between privately and publicly managed settings in their shares of vulnerable children	86
Table 4.1. Share of staff time at this early childhood education and care setting spent on different tasks	98
Table 4.2. Practices to support children's social and emotional development in early childhood education and care	103
Table 4.3. Practices to support children's early language development in early childhood education and care	104
Table 4.4. Practices to facilitate children's play and child-centred planning in early childhood education and care	105
Table 4.5. Practices to support children's early literacy development in early childhood education and care	106
Table 4.6. Practices to support children's early numeracy development in early childhood education and care	107
Table 4.7. Use of adaptive practices in early childhood education and care	109
Table 4.8. Practices to support children's behaviour in early childhood education and care	111
Table 4.9. Scenarios and possible response strategies of how ECEC staff may adapt their practices in response to children's initiatives	113
Table 5.1. Practices to facilitate parent/guardian engagement in early childhood education and care settings	131
Table 6.1. Content areas covered by professional development in the 12 months prior to the survey	144
Table 6.2. Barriers to participation in professional development for early childhood education and care staff	149
Table 6.3. Professional development needs of staff in early childhood education and care settings	157
Table 7.1. Professional development needs of early childhood education and care setting leaders	168
Table 8.1. Staff shortages hindering early childhood education and care settings' capacity to provide a quality environment for children	187
Table 8.2. Sources of stress for early childhood education and care staff	195
Table 8.3. Reasons to leave the early childhood education and care staff role	198
Table 8.4. Job demands and resources and their links to stress for staff in early childhood education and care settings	202
Table 9.1. Engagement with external actors in early childhood education and care settings	211
Table 9.2. Frequency of monitoring practices in early childhood education and care settings	217
Table A A.1. Overview of early childhood education and care system-level indicators in Chile	233
Table A A.2. Overview of early childhood education and care system-level indicators in Colombia	236
Table A A.3. Overview of early childhood education and care system-level indicators in Denmark	239
Table A A.4. Overview of early childhood education and care system-level indicators in Finland	241
Table A A.5. Overview of early childhood education and care system-level indicators in the Flemish Community of Belgium	244
Table A A.6. Overview of early childhood education and care system-level indicators in Germany	247
Table A A.7. Overview of early childhood education and care system-level indicators in Ireland	249
Table A A.8. Overview of early childhood education and care system-level indicators in Israel	251
Table A A.9. Overview of early childhood education and care system-level indicators in Japan	254
Table A A.10. Overview of early childhood education and care system-level indicators in Morocco	257
Table A A.11. Overview of early childhood education and care system-level indicators in New Brunswick (Canada)	260
Table A A.12. Overview of early childhood education and care system-level indicators in New Zealand	263
Table A A.13. Overview of early childhood education and care system-level indicators in Norway	265
Table A A.14. Overview of early childhood education and care system-level indicators in Quebec (Canada)	268
Table A A.15. Overview of early childhood education and care system-level indicators in Spain	270
Table A A.16. Overview of early childhood education and care system-level indicators in Sweden	272
Table A A.17. Overview of early childhood education and care system-level indicators in Türkiye	275
Table A B.1. Adjudication rules for setting or leader data	282

Table A B.2. Adjudication rules for staff data	282
Table A B.3. Settings for children under age 3: Leader participation and recommended ratings	283
Table A B.4. Settings for children under age 3: Staff participation and recommended ratings	283
Table A B.5. Pre-primary education (ISCED level 02): Leader participation and recommended ratings	284
Table A B.6. Pre-primary education (ISCED level 02): Staff participation and recommended ratings	285
Table A D.1. Chapter 1: Strengthening early childhood education and care: Overview of results from TALIS Starting Strong 2024	300
Table A D.2. Chapter 2: Building a strong early childhood education and care workforce	300
Table A D.3. Chapter 3: Structural features of high-quality early childhood education and care	301
Table A D.4. Chapter 4: Staff practices with children and time use in early childhood education and care settings	301
Table A D.5. Chapter 5: Building awareness and acceptance of diversity in early childhood education and care settings through staff practices and engagement with families	302
Table A D.6. Chapter 6: Developing early childhood education and care staff expertise	302
Table A D.7. Chapter 7: Developing leadership in early childhood education and care settings	303
Table A D.8. Chapter 8: Retaining early childhood education and care staff	303
Table A D.9. Chapter 9: Looking forward: Preparedness for change in early childhood education and care	304
Table A D.10. Leader responses: Statistical compendium from TALIS Starting Strong 2024	305
Table A D.11. Staff responses: Statistical compendium from TALIS Starting Strong 2024	306

What is TALIS Starting Strong?

Introduction

The OECD Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) uses questionnaires administered to staff and leaders to gather data about a variety of aspects related to their background, training and daily work. For example, TALIS Starting Strong collects data about staff and leader demographics (e.g. age, gender) and ECEC settings' characteristics (e.g. size, location). Staff also provide information about their working hours; professional development; contract modalities; practices with children and families; and their well-being, job satisfaction and career intentions. Additional information on the areas covered by the survey can be found in the *TALIS Starting Strong 2024 Conceptual Framework* (OECD, 2025^[1]).

How is TALIS Starting Strong implemented?

The TALIS Governing Board (TGB) leads the overall TALIS programme, with an Informal Group within the TGB focused specifically on TALIS Starting Strong. The TGB is composed of a representative from each country and territory that participates in the survey. The TGB oversees the OECD Secretariat, which in turn manages a consortium of international actors that together develop and implement TALIS Starting Strong.

A diverse group of ECEC experts, guided by the TGB and TALIS Starting Strong Informal Group, drafts the questions that appear in the survey. Each question is translated into the national languages of every participating country and subnational entity. The questions are tested to verify their translations and their functioning.

Each country and subnational entity chooses to administer TALIS Starting Strong in one or two levels of ECEC: pre-primary (International Standard Classification of Education [ISCED] level 02) and settings for children under age 3. Within each level in each country or subnational entity, a representative sample of roughly 1 200 staff from 180 ECEC settings are asked to complete the survey along with their setting leaders.

Which countries and subnational entities participate in TALIS Starting Strong?

TALIS Starting Strong 2024 includes 15 countries and subnational entities at the level of pre-primary settings (ISCED level 02): Chile, Colombia, Denmark, Finland, the Flemish Community of Belgium, Germany, Ireland, Israel, Japan, Morocco, New Zealand, Norway, Spain, Sweden and the Republic of Türkiye (hereafter “Türkiye”). In addition, eight countries and subnational entities are included at the level of settings for children under age 3: the Flemish Community of Belgium, Germany, Ireland, Israel, New Brunswick (Canada), New Zealand, Norway and Quebec (Canada).

Reader's Guide

Countries and subnational entities

In tables, countries and subnational entities are sorted in alphabetical order, with one exception: New Zealand's data represent only respondents included in the sample and not the full national population targeted by the survey. As such, they are placed at the bottom of tables for each level of ECEC and annotated (**) in tables, figures and the text.

One note is added to the information on the data for Israel:

- The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

High exclusion rates

For reasons of practicality, safety or economy (e.g. remote schools, unique demographic groups, school types, areas under civil unrest, natural catastrophe), the national survey population could be reduced by no more than 5% of the international target population of staff for the relevant level of ECEC (pre-primary or settings for children under age 3). However, not all countries and subnational entities could adhere to this rule:

- Germany: home-based settings (6.5% of staff) were excluded from the sample of settings for children under age 3.
- Israel: ultra-Orthodox settings (26.3% of settings) were excluded from the sample of pre-primary settings; the resulting staff exclusion rate is unknown.
- New Zealand: Te Kōhanga Reo (Māori language immersion environment for children and families) were excluded at both levels of ECEC (12.8% of pre-primary staff and 12.9% of staff in settings for children under age 3). Free kindergartens (3.1% of staff) and playcentres (13.8% of staff) were also excluded from the sample of settings for children under age 3.

Low response rates

Low response rates are a potential source of non-response bias. Non-response bias can occur if non-respondents are systematically different (in terms of their level of education, for example) from those who agree to participate in the survey.

Achieving strong survey response rates is a growing challenge around the world. In addition, the nature of the ECEC sector in many countries creates further challenges for surveying this population. For instance, in many countries, the ECEC system is fragmented, with oversight and responsibility for the sector spread across several ministries and across levels of governance, with municipalities often having an important

role. This creates challenges for even establishing a sampling frame at the national level in many places (as reflected in the high exclusion rates, in some cases) and complicates the process of contacting ECEC settings once the frame has been established. In addition, the private sector has a significant role in providing ECEC in many countries, which can limit the ability of central authorities to motivate participation. These challenges are compounded by the fact that countries often face ECEC staff shortages and ECEC settings are typically small: these features place an additional strain on recruiting ECEC settings to participate, as ECEC leaders may be wary of asking their staff to take the time to complete a survey.

Despite the many challenges, countries and subnational entities participating in TALIS Starting Strong 2024 invested important efforts in reaching their populations of ECEC staff and leaders, ultimately achieving a range of response rates (see Annex B). Nonetheless, data for ECEC systems that did not meet technical standards with respect to response rates are annotated (*) in tables and figures:

- pre-primary settings (ISCED level 02): Germany, Ireland and Norway
- settings for children under age 3: the Flemish Community of Belgium, Ireland, New Brunswick (Canada), Norway and Quebec (Canada).

New Zealand also did not meet the TALIS 2024 technical standards with respect to participation rates; data from New Zealand are annotated separately (**) due to sparse responses that led to unanticipated exclusions for some segments of the target population, as described above. As a result of these broad exclusions, the samples could not be adequately adjusted to represent ECEC settings and staff in New Zealand overall (see Annexes B and C). For these reasons, the respondents in the samples from New Zealand represent only respondents included in the sample and not ECEC staff and settings from the whole country. In all other countries and subnational entities included in this report, data are weighted to represent the full population targeted by the survey; that is, the samples are constructed to be representative of ECEC staff and settings in the whole country or subnational entity.

Countries and subnational entities undertook non-response bias analyses to understand the likelihood of bias in the TALIS Starting Strong 2024 samples. These non-response bias analyses did not suggest a direct link between the levels of response rates and the likelihood of bias in the samples, although in many instances this was difficult to estimate due to a lack of data on ECEC staff and leaders from sources other than TALIS Starting Strong. Given the limited data available from or about the population of ECEC staff and leaders targeted by TALIS Starting Strong, information from all participating countries and subnational entities is presented in this report, despite not achieving the technical standards with respect to participation rates for all samples. All other technical standards were met (OECD, forthcoming^[2]).

Although countries and subnational entities are flagged (*) only in tables and figures and not in the text of this report (with the exception of New Zealand**), caution is required when interpreting estimates for samples that did not meet the TALIS technical standards with respect to response rates due to a higher risk of non-response bias.

Reporting conventions

Classification of levels of education and early childhood education and care

The classification of ECEC settings as pre-primary, as well as the other levels of education described in this volume, is based on the International Standard Classification of Education (ISCED). ISCED is an instrument for compiling statistics on education internationally. ISCED-2011 is the basis of the levels presented in this publication. It distinguishes the following levels of education:

- early childhood education (ISCED level 0)
 - early childhood educational development (ISCED level 01)

- pre-primary education (ISCED level 02)
- primary education (ISCED level 1)
- lower secondary education (ISCED level 2)
- upper secondary education (ISCED level 3)
- post-secondary non-tertiary education (ISCED level 4)
- short-cycle tertiary education (ISCED level 5)
- bachelor's or equivalent (ISCED level 6)
- master's or equivalent (ISCED level 7)
- doctoral or equivalent (ISCED level 8).

Within early childhood education (ISCED level 0), settings classified under ISCED-2011 have an intentional educational component and aim to develop cognitive, physical and socio-emotional skills necessary for participation in school and society. Programmes at this level are often differentiated by age, with early childhood educational development serving children under age 3 and pre-primary education serving children from age 3 until entry into primary school. Pre-primary settings in TALIS Starting Strong meet the ISCED-2011 definition for ISCED level 02. Settings serving children under age 3 in TALIS Starting Strong were not required to meet the ISCED-2011 definition for ISCED level 01.

Despite the distinction made by ISCED-2011 within ISCED level 0, many countries and subnational entities, including several participating in TALIS Starting Strong, have an integrated ECEC system (see Annex A). In integrated ECEC systems, programmes from birth or age 1 until entry into primary school are offered together, generally with the same government oversight. For countries and subnational entities with integrated ECEC systems, the TALIS Starting Strong sampling strategy randomly split ECEC programmes that were expected to cover both age groups to be included in the sampling universe for one population of interest or the other. In this way, programmes could be sampled as part of the pre-primary sample or as part of the sample of settings for children under age 3, but the same programme would not be sampled for both levels of ECEC.

Next, staff were sampled within these settings if they were serving children within the designated level of ECEC (see Annex B). As a result, the sample of pre-primary staff and leaders is representative of staff and settings providing pre-primary education across all 15 participating countries and subnational entities, regardless of whether an integrated system exists or not. Similarly, the sample of staff and leaders in settings for children under age 3 is representative of staff and settings providing services for this age group across all eight participating countries and subnational entities, regardless of whether an integrated system exists or not. Settings may also serve younger or older children, in addition to the level of ECEC for which they were sampled, regardless of whether the ECEC system overall is integrated. Throughout this volume, results are described according to whether they are from the pre-primary sample or the sample of settings for children under age 3, although this may not reflect the organisation of the overall ECEC system or the mix of ages of children served in a particular setting. When not otherwise specified, findings refer to both levels of ECEC (i.e. pre-primary and settings for children under age 3).

Settings

The report uses the term “settings” as shorthand to describe all ECEC settings, at both levels of ECEC. The specific programmes or settings vary across and within countries (see Annex A for details on the types of settings in each participating country and subnational entity).

All officially registered, centre-based pre-primary programmes and all officially registered, centre- and home-based programmes serving children under age 3 in each participating country and subnational entity were considered in-scope for the TALIS Starting Strong 2024 sample. Home-based settings were not part

of the population targeted by the survey at the pre-primary level (ISCED 02). However, in many countries and subnational entities, older children may also attend home-based ECEC settings.

Data were collected in home-based settings for children under age 3 in the Flemish Community of Belgium, Israel, New Brunswick (Canada), New Zealand** and Quebec (Canada) (Table 1). These settings typically involve a single staff member working at home with a small group of children, although there is wide variation in how this type of ECEC is organised, regulated and delivered to families. In contrast, centre-based settings generally include multiple classrooms/playrooms and staff members working in teams in facilities designed for group-based care, such as early learning centres, crèches, kindergartens, preschools or schools. Centre- and home-based settings often have important differences in their management, financing and size in terms of the number of children served, among others. When interpreting TALIS Starting Strong 2024 results for the five countries and subnational entities that include a mix of centre- and home-based settings, it is important to bear in mind this mixed composition of the samples.

Table 1. Types of early childhood education and care settings for children under age 3 and their staff in TALIS Starting Strong 2024

Percentage of staff working in centre- and home-based settings and of centre- and home-based settings, based on sampling information for respondents

	Percentage of staff, from staff responses		Percentage of settings, from leader responses	
	Centre-based settings	Home-based settings	Centre-based settings	Home-based settings
Flemish Community (Belgium)*	81.3	18.7	41.3	58.7
Germany	100.0	0.0	100.0	0.0
Ireland*	100.0	0.0	100.0	0.0
Israel	88.6	11.4	49.7	50.3
New Brunswick (Canada)*	95.3	4.7	77.6	22.4
Norway*	100.0	0.0	100.0	0.0
Quebec (Canada)*	83.4	16.6	32.6	67.4
<i>New Zealand**</i>	97.6	2.4	96.8	3.2

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Staff and leaders who responded to the main or short version of the combined questionnaire (CQM or CQS) are included in the percentage of both staff and leaders in this table.

Type of ECEC setting was identified based on the sampling frame and weighted according to data collected from respondents. Home-based data were not included in the sampling frame for Germany, Ireland or Norway. For more information, see Annexes B and C.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.3.1

Staff and leaders

The report uses the term “staff” as shorthand for the TALIS Starting Strong population of teachers, assistants, staff for individual children, staff for special tasks, interns and any other type of ECEC staff working regularly in a pedagogical way, providing learning opportunities or care, with children. Staff were asked to report on the role that best describes their work at their ECEC setting. Response options were translated and adapted to meet the needs of participating ECEC systems and these terms were mapped to the seven international categories of staff (Table 2): leaders, teachers, assistants, staff for individual children, staff for special tasks, interns and other. In some systems, a direct translation of the international terms may not fully align with how staff describe themselves in their local language, for instance when the term “teacher” is not typically used to describe ECEC staff despite their primary responsibility for the care and education of a group of children.

Table 2. Early childhood education and care staff roles in the TALIS Starting Strong 2024 questionnaire

International staff categories and their descriptions as provided in the English source version of the staff questionnaire

ECEC setting leader	Individuals with the most responsibility for the administrative, managerial and/or pedagogical leadership at the ECEC setting
Teacher	Individuals responsible for the care and education of a group of children (e.g. educators)
Assistant	Individuals assisting with the care and education of children (e.g. assistants, auxiliary staff)
Staff for individual children	Individuals responsible for the care and education of specific children (e.g. integration aides, special needs assistants)
Staff for special tasks	Individuals responsible for specific subjects (e.g. music or physical education teachers)
Intern	Individuals acquiring further qualifications while working
Other	-

Note: This question was only included for respondents who received the staff questionnaire or the short version of the combined questionnaire. Respondents identified as the person with the most responsibility for administrative, managerial and/or pedagogical leadership in their setting (i.e. the “leader”) during the sampling process did not receive this question.

Source: OECD (2025^[3]), *TALIS Starting Strong 2024 Questionnaires*.

The report uses the term “leader” to identify the person who was identified as having the most responsibility for administrative, managerial and/or pedagogical leadership in their setting. In addition, leaders who also had staff duties (i.e. those who worked regularly in a pedagogical way with children in addition to their leadership roles, and those working alone) are included in both staff and leader data throughout this report, where possible.

Responses from staff and leaders come from four different questionnaire versions. The leader questionnaire (LQ) was given to the one individual identified during the sampling process as having the most responsibility for the administrative, managerial and/or pedagogical leadership at the ECEC setting. The staff questionnaire (SQ) was given to individuals with direct responsibilities (either on their own or in co-operation with colleagues) for the education and/or care of children in the ECEC setting. The main combined questionnaire (CQM) was used for leaders with staff duties, whereas the short version of the combined questionnaire (CQS) was used for respondents working alone (i.e. in one-person settings). The CQM and CQS include survey questions from the leader and staff questionnaires; respondents who answered either the CQM or CQS are included in the staff and leader data (see OECD (forthcoming^[2]), for more information). Countries and subnational entities could choose to use either the CQM or the CQS or both, to best match the profiles of ECEC staff and leaders in their contexts (Table 3).

Table 3. Use of different questionnaire types in TALIS Starting Strong 2024

Percentage of staff's and leaders' responses collected by questionnaire type

	Staff responses			Leader responses		
	Staff questionnaire (SQ)	Combined questionnaire main (CQM)	Combined questionnaire short (CQS)	Leader questionnaire (LQ)	Combined questionnaire main (CQM)	Combined questionnaire short (CQS)
Pre-primary settings (ISCED level 02)						
Chile	97.0	3.0	0.0	82.2	17.8	0.0
Colombia	83.8	2.0	14.2	64.9	4.1	31.0
Denmark	92.7	7.3	0.0	38.9	61.1	0.0
Finland	98.7	1.3	0.0	84.3	15.7	0.0
Flemish Community (Belgium)	100.0	0.0	0.0	100.0	0.0	0.0
Germany*	94.2	5.8	0.0	44.6	55.4	0.0
Ireland*	91.6	7.6	0.7	58.3	37.6	4.0
Israel	71.5	28.4	0.0	0.0	99.6	0.4
Japan	100.0	0.0	0.0	100.0	0.0	0.0
Morocco	90.3	3.6	6.1	78.5	7.7	13.8
Norway*	98.2	1.8	0.0	86.1	13.9	0.0
Spain	97.5	2.5	0.0	77.2	22.8	0.0
Sweden	100.0	0.0	0.0	100.0	0.0	0.0
Türkiye	100.0	0.0	0.0	100.0	0.0	0.0
<i>New Zealand**</i>	85.8	14.2	0.0	28.8	71.2	0.0
Settings for children under age 3						
Flemish Community (Belgium)*	94.9	4.2	1.0	82.1	14.8	3.1
Germany	91.8	8.2	0.0	41.6	58.4	0.0
Ireland*	94.2	4.8	1.0	66.8	26.6	6.6
Israel	77.4	11.1	11.5	0.0	49.4	50.6
New Brunswick (Canada)*	93.4	1.9	4.7	67.6	10.0	22.4
Norway*	98.7	1.3	0.0	88.0	12.0	0.0
Quebec (Canada)*	82.6	0.8	16.6	29.6	3.0	67.4
<i>New Zealand**</i>	87.2	12.8	0.0	37.1	62.9	0.0

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Note: Percentages are weighted (see Annex C).

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.3.1.

Leaders, whether responding to the LQ, CQM or CQS, provided information on the characteristics of their settings and their own work and working conditions. Where responses from leaders are presented in this report, they are usually weighted to be representative of ECEC settings. In some cases, leader responses are treated as attributes of staff working conditions (e.g. the size of the ECEC setting where staff work). In such cases, leaders' answers are analysed at the staff level and weighted to be representative of staff (see Annex C).

Results are presented only when estimates are based on at least 30 staff and/or 10 settings/leaders.

Self-reported data

TALIS Starting Strong results are based exclusively on self-reports from staff and leaders and, therefore, represent their opinions, perceptions, beliefs and accounts of their activities. As with any self-reported data, this information is subjective and may, therefore, differ from data collected through other means (e.g. administrative data or observations). The same is true of leaders' reports about setting characteristics

and practices, which may differ from descriptions provided by administrative data at a national, subnational, regional or local government level.

While self-reported data allow respondents to share their beliefs and perceptions, there are also limitations when interpreting findings based on self-reported information:

- **Cultural response patterns:** Social and cultural backgrounds might systematically affect how individuals respond to questions (e.g. tending to respond in moderate or extreme ways) (van de Vijver and Leung, 1997^[4]).
- **Social desirability bias:** Individuals respond in ways that they think are viewed favourably but do not represent their true beliefs or actions (Krumpal, 2011^[5]).
- **Validity concerns:** Respondents might have to remember something that occurred a long time in the past, or their interpretation of a question is not consistent.

As a result, direct comparisons across countries and subnational entities using self-reported measures warrant caution.

Abbreviations

Coef.	Linear regression coefficient
Dif.	Mean difference
ECEC	Early childhood education and care
ISCED	International Standard Classification of Education
PPP	Purchasing power parity
S.D.	Standard deviation
S.E.	Standard error
% dif.	Percentage-point difference

Technical information

Causality

TALIS Starting Strong is not designed to establish causal relationships between two variables. All analysis presented in this report should be interpreted as uncovering the presence (or absence) of statistical association, i.e. whether or not variation in one variable (for instance, staff participation in professional development) is systematically associated with variation in another variable (for instance, self-efficacy in working with children). These associations do not reflect a causality between two variables, i.e. whether making staff participate in professional development, all other things being kept equal, would cause a change in self-efficacy.

Symbols used in tables

Four symbols are used to denote non-reported estimates:

- **a:** The question was not administered in the country or subnational entity.
- **c:** There were too few observations to provide reliable estimates (i.e. there were fewer than 30 staff or fewer than 10 settings/leaders with valid data).

Note: In the case of simple tables (e.g. Table Staff.3), the number of observations is evaluated for the entire question, regardless of the distribution of observations across response categories. In the case of contingency tables, where two or more questions are combined for

reporting (e.g. Table D.2.4), the number of observations is evaluated for each combination of categories individually. The sole exception to this rule is reporting on staff and leader gender: only the percent of female staff is reported in Tables Staff.1 and Leader.1.

- **m:** Data were collected but not included in the publication for technical reasons (e.g. there was no observation in the sample). Wherever a particular response option within the variable of interest was not selected by any respondent, a 0 is reported. In the case of contingency tables where there is no respondent in one of the disaggregated categories, the estimate for the variable of interest for that category is reported as “m,” rather than 0.
- **w:** Data were withdrawn at the request of the country or subnational entity concerned.

Rounding figures

Because of rounding, some figures in tables may not add up exactly to the totals. Totals, differences and averages are always calculated on the basis of exact numbers and are rounded only after calculation.

All standard errors in this publication have been rounded to one or two decimal places. Where the value 0.0 or 0.00 is shown, this does not imply that the standard error is zero, but that it is smaller than 0.05 or 0.005, respectively.

Standard errors

The statistics in this report represent estimates based on samples of staff and setting leaders, rather than values that could be calculated if every staff member and leader in every country or subnational entity had responded to the survey. Standard errors measure the degree of uncertainty of the estimates and are available in all annex tables (see Annexes C and D). To simplify the presentation of results and enhance readability, estimates reported in the text of this volume do not show the standard errors.

Focusing on statistically significant differences

This volume focuses on statistically significant values or differences, both from bivariate analyses and multivariable regressions. Statistically significant values are principally denoted in darker colours in figures and in bold font in tables. Unless otherwise specified, the significance level is set to 5%. See Annex C for further information.

Further technical documentation

For further information on TALIS Starting Strong documentation, instruments and methodology, see the *TALIS 2024 Technical Report* (OECD, forthcoming^[2]) and the *TALIS 2024 User Guide* (OECD, forthcoming^[6]).

Annex D provides a list of the tables of results referred to throughout the report. This report uses the OECD StatLinks service. All tables and charts are assigned a URL leading to a corresponding Excel™ workbook containing the underlying data. These URLs are stable and will remain unchanged over time. In addition, readers of the e-books will be able to click directly on these links and the workbook will open in a separate window if their Internet browser is open and running.

Content of this report

This report is organised as follows:

- **Chapter 1** provides an overview of results from TALIS Starting Strong 2024, highlighting ways to strengthen ECEC for the future.
- **Chapter 2** provides an overview of the profiles of staff and leaders who work in the ECEC sector.
- **Chapter 3** examines characteristics of ECEC settings across the participating countries and subnational entities.
- **Chapter 4** investigates how ECEC staff spend their time and the different types of practices they report using to support children's development, learning and well-being.
- **Chapter 5** looks at the practices used to promote awareness and acceptance of diversity as well to engage with families in ECEC settings.
- **Chapter 6** considers opportunities for and barriers to professional development for ECEC staff to build on their initial education and training.
- **Chapter 7** examines how leaders are prepared and supported to work with staff and shape high-quality practices with children in their ECEC settings.
- **Chapter 8** discusses the capacity of the ECEC sector to attract and retain a high-quality workforce, looking in particular at job satisfaction, emotional and physical well-being, and sources of work-related stress.
- **Chapter 9** explores areas for strengthening the capacity of ECEC to respond to complex and shifting demands, highlighting co-operation with other actors and services, professional collaboration, monitoring practices, digital preparedness and strategies to cope with unexpected disruptions.
- **Annex A** contains information about the ECEC system in each participating country and subnational entity.
- **Annex B** contains information about the TALIS Starting Strong target populations, the samples and a summary of the adjudication outcomes for each sample, along with cautionary notes about the interpretations of results, whenever necessary.
- **Annex C** contains information about complex variables and statistical methods used to analyse data.
- **Annex D** contains the full list of online result tables.
- **Annex E** lists the members of the Informal Group on TALIS Starting Strong, a sub-group of the TALIS Governing Board, managers in the national study centres, members of the OECD Secretariat, members of the TALIS Consortium and members of TALIS expert groups that contributed to the TALIS Starting Strong 2024 cycle.

References

- Krumpal, I. (2011), "Determinants of social desirability bias in sensitive surveys: A literature review", *Quality and Quantity*, Vol. 47/4, pp. 2025-2047, <https://doi.org/10.1007/S11135-011-9640-9>. [5]
- OECD (2025), *TALIS Starting Strong 2024 Conceptual Framework*, OECD Publishing, Paris, <https://doi.org/10.1787/f49228be-en>. [1]
- OECD (2025), *TALIS Starting Strong 2024 Questionnaires*, <https://www.oecd.org/en/data/datasets/TALIS-Starting-Strong-Database.html> (accessed on 25 October 2025). [3]
- OECD (forthcoming), *Teaching and Learning International Survey (TALIS) 2024 Technical Report*, OECD Publishing, Paris, forthcoming. [2]
- OECD (forthcoming), *Teaching and Learning International Survey (TALIS) 2024 User's Guide*, OECD Publishing, Paris, forthcoming. [6]
- van de Vijver, F. and K. Leung (1997), *Methods and Data Analysis for Cross-cultural Research*, Sage, <https://research.tilburguniversity.edu/en/publications/methods-and-data-analysis-for-cross-cultural-research> (accessed on 11 June 2025). [4]

Executive Summary

The quality of early childhood education and care (ECEC) depends fundamentally on the people who deliver it. The professionals working in ECEC settings shape children's daily experiences and play a key role in achieving the broad policy goals set for this sector. The OECD Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) gathers insights directly from the ECEC workforce, exploring their daily work with children, their background, opportunities for professional development, and working conditions. The results from TALIS Starting Strong 2024 reflect the voices of ECEC staff and leaders in 17 countries and subnational entities for two levels of ECEC: pre-primary and settings for children under age 3. These findings offer valuable evidence to inform strategies for strengthening ECEC systems for the future.

ECEC staff focus on social and emotional development in their practices with children

- Staff activities support child development, with a particular emphasis on social and emotional growth. Practices like encouraging children to help each other and express their feelings are used daily by a majority of ECEC staff in all countries and subnational entities. In contrast, literacy and especially numeracy activities tend to be less frequent. For example, less than 50% of staff in pre-primary settings in Denmark, Finland, Germany and Morocco read books to children on a daily basis compared to over 80% of staff in settings for children under age 3 in New Brunswick (Canada) and New Zealand** and at both levels of ECEC in Ireland.
- ECEC staff spend most of their time in direct contact with children, though this varies widely between survey participants - from 68% in Colombia to 90% in Denmark. Notably, if staff work longer hours this does not necessarily mean they spend more time with children.
- Engaging in other tasks while in contact with children is common in all systems, but some staff lack dedicated time for tasks not involving children. Planning or preparing activities alone is the work-related task consistently associated with staff reporting they work longer hours.

Staff like their jobs and feel valued by parents but mitigating stress can help retain staff in the sector

- Job satisfaction among ECEC staff and leaders is high, with over 90% of staff in most countries and subnational entities reporting they are satisfied and feel valued by parents and children. In all systems, more than 80% of staff enjoy working at their ECEC setting and a large majority of them would still choose to work in the sector if they could decide again.
- Perceived social recognition is often higher amongst ECEC staff compared to staff working in other levels of education. The share of staff who feel valued by society varies across systems, ranging between 24% of pre-primary staff in Norway to 88% in Colombia.

- The percentage of staff reporting they experience work-related stress ranges from under 20% in pre-primary education in Colombia and Israel to over 75% in Germany, in both levels of ECEC. In many countries and subnational entities, having too many tasks to do at the same time and performing extra duties are top sources of stress.
- Stress may contribute to the critical staff shortages reported in ECEC settings. Staff experiencing higher stress are more likely to consider leaving their roles due to mental or physical health issues, or to pursue a career in another sector. Leaders identify staff absences and shortages as the main barrier to providing quality environments for children. Staff also report a lack of substitutes is a major barrier to participation in professional development activities.

ECEC staff are generally well prepared, but most effective training methods are less common

- Most ECEC staff are trained to work with children, with rates ranging from 87% in settings for children under age 3 in Israel to 99% in pre-primary settings in Spain and Türkiye. However, this is not universal and in some countries and subnational entities, assistants have lower qualifications than teachers. Those with post-secondary education tend to have covered a greater breadth of topics relevant for working with children. This exposure is associated with higher levels of self-efficacy which, in turn, is associated with lower work-related stress levels.
- Ongoing professional development also supports staff self-efficacy but is often limited to courses and seminars - used by over 60% of staff across all countries and subnational entities. More effective formats, such as job-embedded training and collaborative learning approaches (for example coaching or induction) are less common. About half of staff or less in settings for children under age 3 in Quebec (Canada) and at both levels of ECEC in Ireland participate in these formats. In contrast, around 80% of staff in pre-primary settings in the Flemish Community of Belgium and at both levels of ECEC in New Zealand** report job-embedded professional development.
- Staff report a strong need for additional budget and training resources to support children with special education needs. For example, in pre-primary settings in Japan, 76% of staff report a need for ongoing training in this area despite 64% having recently participated in related professional development. In most other systems, this topic is rarely covered in recent training activities. For instance, only 22% of staff in settings for children under age 3 in Germany received training on special education needs in the year prior to the survey.

ECEC leaders in public settings face more challenges than those in private settings

- ECEC leaders play a vital role in supporting staff, helping to lower work-related stress and enhancing practices with children. Yet, a high share of leaders report significant stress from too much administrative work and the challenge of keeping up with changing requirements from authorities. In most systems, a majority of leaders report a need for greater support from local, regional or national authorities, with the share reaching 85% or more in pre-primary settings in Colombia, Japan and Morocco.
- Public and private ECEC settings are unevenly distributed, with public settings more common in rural areas and in neighbourhoods perceived as less favourable by leaders in several countries and subnational entities. In many systems, leaders in public settings report facing more challenges than their counterparts in private settings, including a higher proportion of vulnerable children (e.g. from socio-economically disadvantaged homes), less adequate physical space (e.g. poor ventilation, high background noise), and less communication with families. Notably, even private,

for-profit ECEC settings tend to receive government funding, highlighting the importance of policies that support equity in access and quality across both public and private sectors.

Overall, the TALIS Starting Strong results underscore the central role of ECEC staff in shaping high quality environments for young children, while also revealing systemic challenges. Despite high levels of job satisfaction and strong engagement with children, many staff face persistent stress. Workforce shortages hinder the delivery of quality ECEC and participation in professional development, even though there is a clear need – especially for supporting children with diverse needs. The findings provide an evidence base for policymakers to strengthen the ECEC workforce, through better working conditions and training, to ensure all children benefit from high quality ECEC experiences.

Results from TALIS Starting Strong 2024



Strengthening Early Childhood Education and Care (ECEC)

The amount of time ECEC staff spend working with young children varies considerably

Across pre-primary systems, staff in **Denmark** work among the fewest hours per week yet spend most of that time in direct contact with children. Staff in **Colombia** have some of the least contact time with children, but among the highest number of overall working hours.



Staff spend **68-90%** of their time in direct contact with children

Staff Time in Direct Contact with Children
In Pre-primary settings



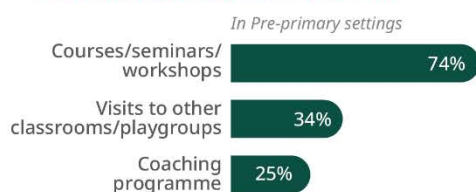
ECEC staff are generally well prepared but need more targeted training

87-99% have received training to work with children

70%+ participate in courses or seminars

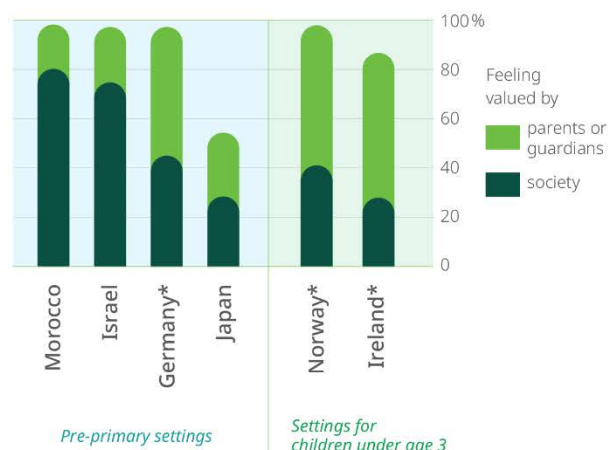
<50% take part in targeted training like coaching

Professional Development Activities



Staff feel valued by parents but less so by society

In most systems, over 90% of ECEC staff are satisfied with their jobs but, in some countries, less than 50% feel valued by society.



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

Source: OECD (2025), *TALIS Starting Strong 2024: Strengthening early childhood education and care*, TALIS, OECD Publishing, Paris.

1

Strengthening early childhood education and care: Overview of results from TALIS Starting Strong 2024

This chapter synthesises findings from the 2024 Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) presented in the subsequent chapters of this volume, drawing them together around three main areas to strengthen early childhood education and care: 1) activities and supports for children and their families; 2) staff's work environment and attracting and retaining a high-quality workforce; and 3) the governance, oversight and structure of the sector that enables access to high-quality services for all children, supporting adaptability in the face of global challenges. The chapter presents key indicators and examples from countries and subnational entities to summarise the findings around these three themes.

Early childhood education and care (ECEC) has the potential to address a range of goals, from supporting young children's well-being to closing opportunity gaps and enabling parents to participate in the labour force. These outcomes for children and families are at the centre of ECEC policies. Yet delivering on the potential of ECEC requires a workforce that is equipped and motivated to meet the unique demands of facilitating young children's development, learning and well-being. In this respect, ECEC policies also need to focus on the sector as a work environment, attracting professionals to the field and encouraging them to stay.

In the context of rapid global change, ECEC remains inherently local, with interactions between children and ECEC staff at the heart of high-quality services. Still, ECEC staff must meet the challenges associated with responding to increasingly diverse populations of children, protecting them in times of crises and uncertainty, and preparing them for the unknown challenges of the future. This scope of work requires the support of ECEC leadership and governance structures that enable strong and stable connections between staff and children and their families.

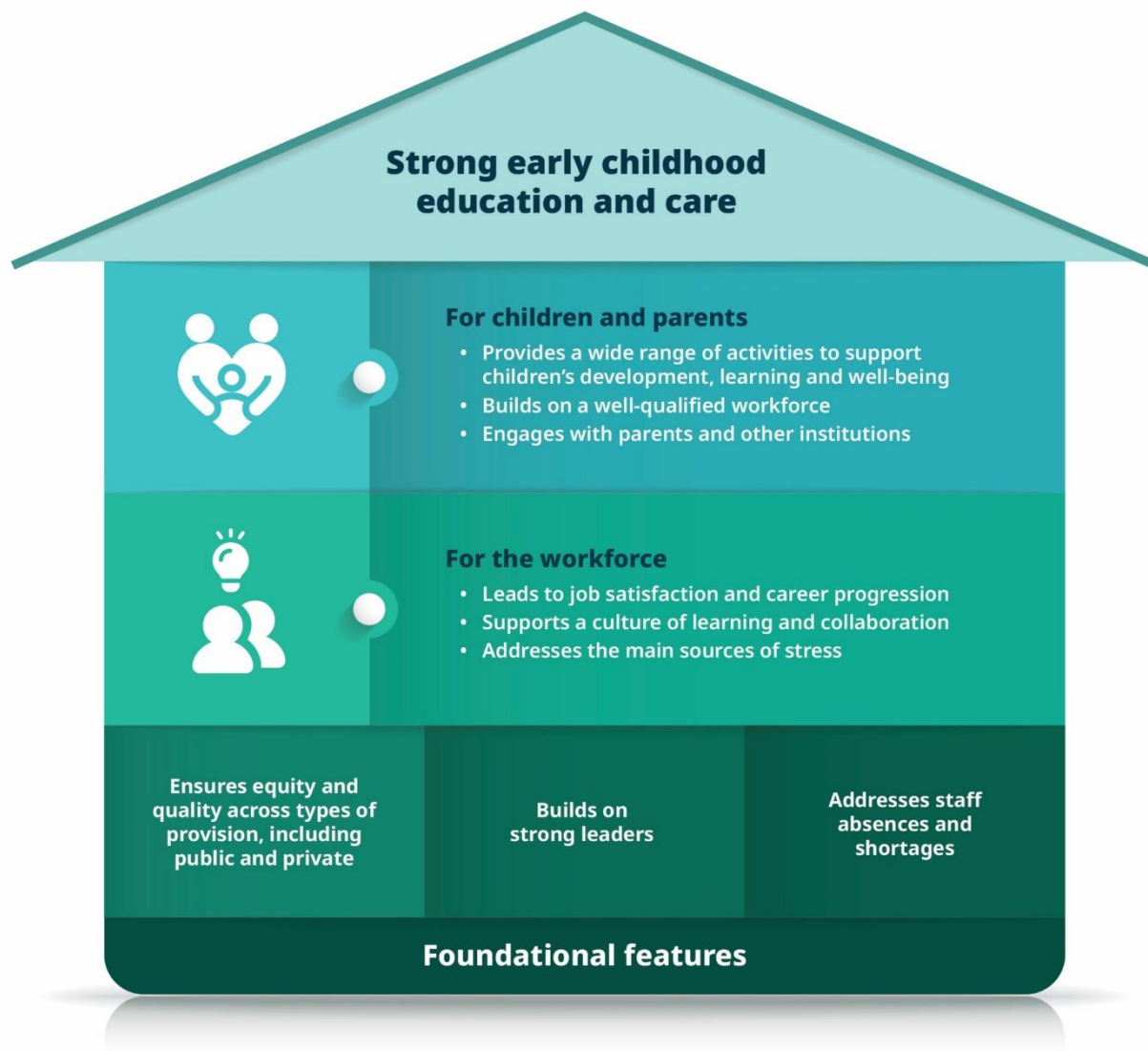
TALIS Starting Strong is the first international survey focusing on staff and leaders in ECEC. Data collection first took place in 2018 and the survey was repeated and extended to more countries in 2024; this more recent data collection is the focus of the current volume.

TALIS Starting Strong offers unique insight into the strengths and challenges of the ECEC sector directly from the perspective of those who are engaged in work with children on a daily basis. These voices from the field go beyond what can be understood from administrative data, giving perspective on multiple aspects of ECEC, including:

- the types of activities and supports that children in ECEC experience every day, as well as the profiles of the staff with whom they interact and the ways families can engage with ECEC settings
- the aspects of working in ECEC that staff appreciate, their opportunities for career progression and sources of work-related stress
- the governance, oversight and structure of job opportunities in the sector that enable access to high-quality ECEC for all children and support adaptability in the face of global challenges.

Together, these different dimensions on which staff and leaders report about their work describe an overall ECEC system (Figure 1.1). This report presents the results of the survey, taking a forward-looking approach: the TALIS Starting Strong data collected in 2024 are used to inform strategies for strengthening ECEC systems in the face of shifting demands on the sector and short-term crises, better equipping these systems to realise the benefits of ECEC for the future. This chapter highlights selected indicators to address these goals, while the remainder of the report goes into greater detail and uses a wider range of information collected through the survey.

Figure 1.1. Framework for analysis of strong early childhood education and care systems



Strong early childhood education and care for children and families

A central goal of ECEC is to support children and families to thrive, closing opportunity gaps across different population groups in the process. Abundant evidence highlights the potential for ECEC to achieve this goal, but positive outcomes depend on the context and features of ECEC policies (Leseman and Slot, 2025^[1]; OECD, 2025^[2]). Importantly, the benefits of ECEC are contingent on its quality, and staff practices with children, particularly their interactions with children and families and the supports they provide for children to interact with one another, with materials and with their communities, are at the heart of quality (OECD, 2018^[3]). The interactions that ECEC staff foster are more than intuitive reactions to children's behaviour or families' requests; rather, high-quality interactions in ECEC settings depend on a workforce that is knowledgeable about the goals of ECEC and strategies to support children's development, learning and well-being, as well as how to meaningfully engage with families around these goals.

Yet the breadth of areas that ECEC staff are responsible for cultivating in young children poses its own challenges as they work to address specific goals in their classrooms/playgroups (OECD, 2021^[4]). Staff participating in TALIS Starting Strong 2024 report on how important they believe it is to develop 12 areas of skills or traits in children to prepare them for life in the future, among the many aspects of their work that are important. An overwhelming majority of staff across countries and subnational entities assigns high levels of importance across these 12 areas (see Table D.1.1 for the complete list included in the questionnaire). Nonetheless, a few skills or traits stand out as being among the top three in all countries and subnational entities, for both levels of ECEC: 1) self-care skills (e.g. feeding themselves, hygiene, dressing); 2) the ability to communicate and co-operate with others; and 3) the ability to understand and manage one's own emotions.

The importance that ECEC staff assign to these skills is reflected in the fact that in all systems, practices to facilitate children's social and emotional development are among those that staff use most often, particularly compared with practices to support early literacy or numeracy (see Chapter 4). Physical and motor skills as well as joy for exploration and learning also tend to be strongly endorsed by nearly all staff in most countries and subnational entities as important to develop in young children. TALIS Starting Strong 2024 sheds light on the many ways that staff deliver strong ECEC services to children and families, supporting children's development across the breadth of areas they view as important to their work and, more generally, promoting children's well-being.

ECEC staff spend most of their time in direct contact with children and often perform a range of other tasks, including planning and preparing activities, at the same time

In all systems, staff spend at least 68% of their work time in direct contact with children, and engaging in other tasks while in contact with children is common in all systems (see Chapter 4). In addition to their work with children, planning or preparing activities for children takes the most amount of ECEC staff's time, often taking place at the same time as work with children. In pre-primary settings in Spain and Türkiye, settings for children under age 3 in the Flemish Community of Belgium and New Zealand**, and at both levels of ECEC in Ireland and Norway, large percentages of staff – more than three-quarters – indicate that they adapt daily activities to children's natural rhythms on at least a daily basis, highlighting that simultaneously planning and working with children is at the core of ECEC staff's work (Table 1.1, Indicator 1.1). On the other hand, in several systems, staff who work long hours tend to spend more time planning and preparing alone, which suggests that completing such tasks contributes to staff working additional hours.

ECEC staff need flexibility and resources to adapt activities in the moment in response to children's levels of engagement, interests and varying levels of development. This type of flexibility is often recognised as reflecting high-quality ECEC for children under age 3, but is also an important tool for supporting children in pre-primary settings, where staff in some contexts may feel too constrained by programme or curricular requirements to implement such responsive practices (Pereira et al., 2025^[5]). Although ECEC staff must be flexible to plan and adapt activities during their work with children, being prepared for this type of dynamic working requires that staff also have time to reflect and plan outside of their work with children. The prevalence of planning while in direct contact with children and longer working hours among staff who spend more time planning and preparing on their own, may reflect that not all staff have adequate paid planning time (see Chapter 4).

Post-secondary education among ECEC staff ensures broader coverage of topics relevant to work with children, but is not guaranteed in most systems

Many countries and subnational entities have a mix of teachers and assistants working directly with children in ECEC settings, whereas other countries and subnational entities rely primarily on teachers with limited use of support staff or formal role differentiation within settings (see Chapter 2). Teachers and

assistants often have different education and training requirements, creating mixed profiles of preparation to work with children within countries and subnational entities. Ireland and Spain are examples of systems with very different approaches to ECEC provision and staff training, but nonetheless both have staff who are well prepared through their initial education and training programmes. Ireland's workforce (for both pre-primary and settings for children under age 3) is a mix of teachers and assistants, as well as a mix of levels of staff education. In contrast, Spain's pre-primary workforce is composed primarily of teachers, staff for individual children and staff for special tasks, nearly all (99%) of whom have at least a bachelor's degree or equivalent (ISCED level 6 and above). Despite the different roles and education profiles, in both Ireland and Spain, over 98% of staff had training specifically to work with children before beginning their jobs as ECEC staff that almost universally (over 90%) included a practical component. Importantly, in both Ireland and Spain, the number of ECEC staff who report their highest level of education is above secondary schooling (ISCED level 4 or higher) is among the highest across all countries and subnational entities represented in TALIS Starting Strong 2024 (Table 1.1, Indicator 1.2).

Countries and subnational entities need to ensure all ECEC staff are prepared for their jobs through post-secondary training that includes a practical component and opportunities for professional development. Staff who have completed post-secondary education have covered a greater breadth of topics relevant for working with children. This greater exposure to relevant content is associated with higher levels of self-efficacy, which, in turn, is associated with lower levels of work-related stress (see Chapters 6 and 8). In addition, practical training is critical for developing ECEC staff capacity to engage in high-quality interactions with children and allows them to see how the skills they are learning can apply in practice (OECD, 2021^[4]). Beyond initial education, professional development helps staff remain up-to-date on new developments and bridge gaps in knowledge and skills, which benefits children and families: Staff engagement in collaborative practices and participation in job-embedded training and collaborative learning are consistent predictors of staff's practices with children that are central to supporting their development, learning and well-being (see Chapters 6 and 9). Ultimately, strong preparation for future ECEC staff together with opportunities for professional development for existing staff can increase their commitment to the field, as more educated staff also tend to have more years of experience in the ECEC sector (see Chapter 2).

Staff need more support to work with children along different dimensions of diversity, particularly those with special education needs

In all countries and subnational entities, a majority of ECEC staff report working with at least one child whose home language is different from the main language used in the ECEC setting, highlighting the diversity of families with whom ECEC staff work (see Chapter 5). Leaders in most pre-primary systems report that they make efforts to employ ECEC staff that are representative of the diverse backgrounds of the children and families served (Table 1.1, Indicator 1.3); however, there is generally no link between the use of practices to engage families in ECEC settings and the prevalence of children with diverse characteristics in the setting, in terms of languages spoken at home, socio-economic status or children's special education needs. This may be related to the fact that working with children from diverse or disadvantaged backgrounds or whose home language is different from the main language used in the ECEC setting are not among professional development topics staff typically covered in the year prior to the survey (see Chapter 6). These are areas that were also generally less covered in staff's initial education but rank high among the areas where staff report a need for ongoing training. Notably, staff report particular needs for more financial and training resources to support children with special education needs (see Table D.1.2 and Chapters 5 and 6). Working with parents or guardians is somewhat more common, both as a topic of recent professional development and in initial education, particularly among staff in settings for children under age 3; ongoing training in this area is not among staff's or leaders' priorities in most systems.

Tailoring family engagement strategies can better support the needs of more diverse children and families in ECEC settings. Engagement with families is an important tool for promoting equity, helping all children to benefit from high-quality interactions between their ECEC and home settings for smoother transitions and continuity of supports between these two contexts. In many ways, ECEC staff are at the forefront of demographic change within countries, with important responsibility for working with families and children from a range of socio-economic, migration and language backgrounds. Staff and leaders in Chile report the use of a wide range of practices to engage with families, from encouraging play and learning activities at home (Table 1.1, Indicator 1.4) to visiting families at home and offering workshops for parents. This range of engagement with families can help ECEC staff identify and support emerging educational needs for young children, ensuring they receive targeted support before the start of primary school. In addition, in Chile nearly three-quarters of staff received recent training on working with children with special education needs (Table 1.1, Indicator 1.5). The fact that ECEC staff and settings are neither doing more to engage with families when they serve more children with a different home language, from socio-economically disadvantaged homes or with special education needs, nor are they doing less to engage with families in contexts of greater diversity can be a missed opportunity for ECEC to support vulnerable children through stronger links with families in contexts of greater diversity (see Chapter 5).

Stronger co-operation between ECEC settings, schools and social services can better support children's development in multiple areas

In just 5 of the 15 pre-primary systems and 2 of 8 systems for children under age 3 do a majority of ECEC setting leaders report that consultation with child development specialists (e.g. speech therapists, psychologists) takes place at least monthly (Table 1.1, Indicator 1.6; see Chapter 9). These types of consultations, which can support staff in their work with children and engage families around their children's specific needs, are more prevalent in pre-primary settings in Denmark, the Flemish Community of Belgium and Spain. Contact with primary schools is also highest in pre-primary settings in the Flemish Community of Belgium and Spain, the two systems where pre-primary settings are most often co-located with primary schools (see Chapter 3). Notably, systems seem to prioritise either staff and leader work directly with families, such as in Chile, or leaders' co-operation with other institutions and services, but not both engagement with families and co-operation with other stakeholders simultaneously.

Co-ordinated policies across ECEC and other sectors can situate ECEC at the centre of aligned efforts to support families and children in their early years, thereby enhancing investments across these areas. Co-operation between ECEC settings and other services (e.g. health, family or social) can support children's development and well-being through multiple channels, including facilitating families' access to networks of co-ordinated services (OECD, 2025^[2]). Likewise, building a clear continuum of services to support children as they transition from ECEC to primary school (as well as from one ECEC setting to another, particularly in split systems; see Annex A) can be vital to improving services at both levels and facilitate transitions for the most vulnerable children. ECEC staff report widespread use of practices to support children's social and emotional development, but more limited practices to support children's early literacy and particularly numeracy skills (see Chapter 4). Co-ordination with primary schools can help ECEC staff better integrate these types of learning opportunities into their practices in ways that are well adapted to young children. Although these different means of co-operating with schools and other sectors cannot replace engagement between families and ECEC settings, they can be an important complement that is not widely developed in many systems.

Table 1.1. Data overview: Strong early childhood education and care for children and families

	1.1. Percentage of staff who adapted activities in response to children's natural rhythms on at least a daily basis in the week prior to the survey	1.2. Percentage of staff whose highest level of education is above secondary level (ISCED Level 4 or higher)	1.3. Percentage of settings that employ staff that are representative of the diverse backgrounds of the children and families served	1.4. Percentage of staff who "agree" or "strongly agree" that "parents or guardians are encouraged by ECEC staff to do play and learning activities with their children at home"	1.5. Percentage of staff whose professional development activities over the 12 months prior to the survey included working with children with special education needs	1.6. Percentage of settings where consultation with child development specialists takes place at least monthly
Pre-primary settings (ISCED level 02)						
Chile	73	91	74	93	74	48
Colombia	62	88	68	97	64	33
Denmark	65	73	76	73	47	80
Finland	57	61	71	79	52	49
Flemish Comm. (Belgium)	45	92	72	88	40	63
Germany*	52	83	55	68	29	37
Ireland*	79	97	82	77	64	23
Israel	62	62	58	91	43	55
Japan	44	99	41	59	64	25
Morocco	58	57	65	96	63	9
Norway*	76	67	84	68	44	49
Spain	80	100	49	96	61	68
Sweden	64	72	80	67	50	46
Türkiye	76	94	51	97	48	24
<i>New Zealand**</i>	72	91	89	74	68	60
Settings for children under age 3						
Flemish Comm. (Belgium)*	80	28	46	69	35	3
Germany	62	86	49	63	22	33
Ireland*	78	91	86	77	62	16
Israel	72	64	41	87	27	25
New Brunswick (Canada)*	67	77	84	75	56	23
Norway*	85	71	77	68	40	58
Quebec (Canada)*	72	82	42	84	53	29
<i>New Zealand**</i>	77	89	98	71	47	60

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Within each indicator, the percentages indicating the most favourable outcomes across countries and subnational entities (with the exception of New Zealand**) within each level of ECEC are indicated in darker shades and the percentages indicating the least favourable outcomes are indicated in white. Intermediate percentages are indicated in intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.2.6, D.4.7, D.5.7, D.5.13, D.9.1 and Staff.16.

StatLink  <https://stat.link/zybq6>

Strong early childhood education and care to attract and retain a high-quality workforce

Another key feature of strong ECEC is to attract and retain a highly qualified and motivated workforce. The connections children and families have with ECEC staff and leaders hinge on having a sufficient pool of skilled, motivated and consistent personnel in ECEC settings. As in most sectors, motivation to join and stay relies on a complex balance between interest in the job; personal, financial and societal rewards; and opportunities for skills development and career progression on the one hand and job demands such as workload and other aspects of the job that can lead to stress and low physical and emotional well-being on the other. The context in the field of ECEC is somewhat tilted toward strong commitment and intrinsic rewards as opposed to high external rewards.

However, similar to the overall education sector and other social and health services, the ECEC sector faces difficulties in securing the needed workforce. The combination of strong job satisfaction alongside challenges for the functioning of the ECEC sector related to staff shortages are key and consistent messages emerging from both leaders and staff participating in TALIS Starting Strong 2024. ECEC staff absences and staff shortages are key hindrances to the quality of the ECEC environment according to leaders (Table 1.2, Indicator 2.1). By creating extra duties, particularly in settings for children under age 3, staff absences are a source of stress for large percentages of staff and leaders (see Chapter 8). Insufficient staff to fill in for absent staff is also the main barrier for participating in professional development in almost all countries and subnational entities and for both levels of ECEC (see Chapter 6). Lowering entry requirements to some jobs in the ECEC sector is not a solution for addressing staff shortages. Staff in a leader or teacher role, compared to those who are assistants or in other roles, report greater use of practices to support children's development in several systems (see Chapter 4), illustrating the importance of a high-skilled workforce to support children's development. TALIS Starting Strong 2024 sheds light on directions to better attract and retain a qualified ECEC workforce.

While job satisfaction is high and staff feel valued by parents and children, staff who are considering leaving their role are likely to leave the ECEC sector entirely

Most ECEC staff and leaders are satisfied with their jobs (Table 1.2, Indicator 2.2) and feel valued by parents and children. Feeling valued by society is less common, although the perceived prestige of the profession is generally higher than for other levels of education (see Chapter 8). The social prestige of the profession is hindered by dissatisfaction with salary, but supported by other contractual arrangements and the level of autonomy staff have to shape their practices. Dissatisfaction with salary and lower perceived prestige of the profession are greater among staff with more experience and education. When asked about the possible reasons to leave their role, in most countries and subnational entities, staff indicate leaving the ECEC sector as one of the main reasons, particularly in settings for children under age 3, while becoming an ECEC leader is not a likely reason. These results suggest that opportunities for career progression are not well established in many countries and subnational entities, pointing to a risk of ECEC staff, particularly the most educated ones, leaving their role.

Organising career pathways is a key strategy to better attract and retain staff but needs to account for differences in the organisation and structure of ECEC sectors. In systems that rely mainly on teachers, rather than a mix of staff categories (e.g. assistants, specialised staff), the teacher role can be developed to include different levels of responsibilities. Shared decision making is associated with stronger satisfaction with leadership; teachers can benefit from more opportunities to take on aspects of leadership themselves as they advance in their careers (see Chapter 7). In systems with a mix of teachers and assistants, establishing career pathways for assistants is also important.

The age structure of staff also matters. At the pre-primary level in Japan, Morocco and Türkiye; in settings for children under age 3 in the Flemish Community of Belgium and New Brunswick (Canada); and in both levels of ECEC in Germany and Ireland, where there are higher shares of staff under age 30, retaining staff through a stable and stimulating working environment, as well as clear career pathways, is a key policy area (see Chapter 2). In systems where 25% or more of staff are aged 50 or older, such as at the pre-primary level in Colombia, Denmark, Finland, the Flemish Community of Belgium, Germany, Spain and Sweden; settings for children under age 3 in Quebec (Canada) and New Zealand^{**}; and both levels of ECEC in Israel and Norway, efforts need to simultaneously focus on attracting new staff through competitive contract terms and encouraging more experienced staff to stay in the sector through ongoing opportunities to develop in their careers and buffering against high levels of work-related stress. In pre-primary settings in Colombia and in both levels of ECEC in the Flemish Community of Belgium and New Zealand^{**}, most staff are satisfied with their salary, highlighting that it is possible to make the profession attractive. However, attention is also needed to ensure that satisfaction with salaries is not driven by a prevalence of staff with low qualifications, who tend to have lower salary expectations.

Job-embedded training and collaborative learning can support career progression and strong practices with children but are less common than traditional forms of learning

Ongoing training and collaboration can play a role in keeping knowledge up-to-date and preparing for career advancement. While engagement in ongoing training is widespread, job-embedded training that is directly tied to everyday work in ECEC settings such as coaching, induction programmes and planned visits to other ECEC settings are less common than traditional forms of training (e.g. courses). Collaborative practices between leaders and staff are common (see Chapter 7). Job-embedded training and collaborative learning are also well aligned with features of ongoing professional development that are particularly effective, such as active learning and coherence with staff's knowledge and experience (see Chapter 6). However, collaborative practices around pedagogical aspects of staff's work do not appear to be a key resource that buffer staff from stress, which suggests that they are not sufficiently developed or targeted (see Chapter 8). The Flemish Community of Belgium and Sweden at the pre-primary level and New Zealand^{**} for both levels of ECEC have high percentages of staff that participate in job-embedded training and collaborative learning (Table 1.2, Indicator 2.3), and regularly co-design activities or content for children with colleagues (Table 1.2, Indicator 2.4). These findings indicate a strong culture of on-the-job and collaborative learning among staff.

Staff and children would both benefit from greater supports for job-embedded training and for strengthening collaborative practices. As a lack of staff to fill in for absences is a major barrier for staff to participate in professional development (see Chapter 6), job-embedded training and collaborative learning are a promising avenue for developing staff competencies in the context of staff constraints since they can be flexibly integrated into staff's daily routines and can sometimes happen when staff are working with children. Nonetheless, collaboration between leaders and staff is less common in settings facing staff shortages (see Chapter 9), indicating that although they are more flexible, these practices require time and resources. These results point to the importance of supporting collaborative and on-the-job learning practices through innovative leadership practices (see below) together with adequate staffing in settings and dedicated time for activities without children, including in teams. In Germany and New Zealand^{**} (both levels of ECEC) as well as in Japan (pre-primary), a majority of staff receive release from work with children during regular working hours to participate in professional development (Table 1.2, Indicator 2.5).

Staff who experience more stress are more likely to consider leaving the ECEC staff role for mental or physical health issues

In all countries and subnational entities, staff who experience more stress are more likely to consider leaving the ECEC staff role for mental or physical health issues, but also for a job outside the ECEC sector

(see Chapter 8). Furthermore, analyses presented in this report find a positive link between staff stress and the use of child-centred approaches to planning for activities with children in some countries and subnational entities, suggesting that staff who invest more in fostering children's development also face a heavy emotional burden. The main sources of stress reported by staff include: having too many tasks to do at the same time; having extra duties due to absent ECEC staff, particularly in settings for children under age 3; and accommodating children with special education needs, particularly in pre-primary settings. More than 60% of staff report that having extra duties due to absent ECEC staff is a source of stress in pre-primary settings in Denmark and in settings for both levels of ECEC in Germany and Norway while this is reported by less than 20% of staff in pre-primary settings in Colombia and Spain (Table 1.2, Indicator 2.6).

Addressing ECEC staff stress is crucial to retain staff in the sector, particularly those who do a lot to enhance their work with children. Multitasking and a higher share of vulnerable children (i.e. with special education needs or from low socio-economic backgrounds) in the group are particularly linked to higher staff stress in several systems, even after accounting for a range of job resources (see Chapter 8). Satisfaction with salary, with the autonomy to shape their practices and leadership are key resources that buffer staff from stress. These results point to approaches that aim to develop professional development, collaborative practices and leadership (see below) together with improved working conditions, particularly for ECEC settings or staff who work in challenging environments. For instance, with growing concerns about children's mental health and increased recognition of the vital role of early interventions, combining strategies to buffer ECEC staff from stress can help them better navigate inclusive practices for children with special education needs in ECEC settings.

Table 1.2. Data overview: Strong early childhood education and care to attract and retain a high-quality workforce

	2.1. Percentage of leaders who report that staff absences hinder capacity to provide a quality environment for children "quite a bit" or "a lot"	2.2. Percentage of staff who "agree" or "strongly agree" with the statement: "All in all, I am satisfied with my job"	2.3. Percentage of staff who participated in job-embedded training and collaborative learning activities during the 12 months prior to the survey	2.4. Percentage of staff who co-design activities or content for children's development, well-being and learning with colleagues at least monthly	2.5. Percentage of staff who receive release from work with children during regular working hours to participate in professional development	2.6. Percentage of staff who report that "having extra duties due to absent staff" is a source of stress "quite a bit" or "a lot"
Pre-primary settings (ISCED level 02)						
Chile	41	95	72	84	28	37
Colombia	34	96	72	77	21	18
Denmark	57	91	67	90	39	68
Finland	38	80	59	90	49	50
Flemish Comm. (Belgium)	33	95	80	81	38	42
Germany*	77	93	58	82	74	74
Ireland*	32	76	51	89	31	41
Israel	29	96	70	67	6	22
Japan	19	76	70	76	57	25
Morocco	22	96	73	80	15	22
Norway*	57	91	58	92	32	61
Spain	14	97	58	83	9	14
Sweden	32	92	74	93	34	58
Türkiye	36	88	69	84	38	31
<i>New Zealand**</i>	21	92	82	88	50	32
Settings for children under age 3						
Flemish Comm. (Belgium)*	27	95	67	72	47	43
Germany	77	87	55	78	75	77
Ireland*	55	74	50	82	29	56
Israel	37	96	76	70	18	28
New Brunswick (Canada)*	52	96	61	84	28	41
Norway*	53	90	57	91	38	60
Quebec (Canada)*	39	89	46	80	30	41
<i>New Zealand**</i>	40	92	81	79	59	51

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes:

Within each indicator, the percentages indicating the most favourable outcomes across countries and subnational entities (with the exception of New Zealand**) within each level of ECEC are indicated in darker shades and the percentages indicating the least favourable outcomes are indicated in white. Intermediate percentages are indicated in intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.6.3, D.6.10, D.8.1, D.8.2, D.8.12, D.9.4.

StatLink  <https://stat.link/weqjkh>

Strong foundations for early childhood education and care

ECEC takes place across a wide range of settings; with a mix of public and private management; various sources of funding; settings located in homes, schools and dedicated ECEC centres; and oversight from different levels of governance (see Chapter 3). These complexities require tailored approaches to define and monitor quality, as well as to support ongoing quality improvement and preparedness for the future.

After staff absences and shortages, according to leaders, changes in funding are considered to be one of the main hindrances to an ECEC setting's capacity to provide a quality environment for children (Table D.1.3 and Chapter 8). Average expenditure on ECEC has increased in OECD countries in the last decade; however, both the changes in and levels of expenditures are highly variable across countries (OECD, 2025^[2]). While increased government support for ECEC is positive overall, evolving investments and priorities can create challenges for the sector to adapt and build sustainable strategies to deliver high-quality ECEC for children and their families, as well as for attracting and retaining a high-quality workforce (Farquharson, 2025^[6]).

In addition, a strong foundation for ECEC for children, families and the workforce relies on more than just funding: Building a structure that is robust enough to promote equitable access and quality across different parts of the system while remaining responsive to local needs, changing demographics, and sudden shocks and crises is a central challenge across levels of ECEC governance. TALIS Starting Strong 2024 gives insight into features of ECEC system organisation from the perspective of leaders, as well as aspects of leadership that underpin high-quality, equitable services for children and families. The survey also offers insight into the staffing structures and challenges for the ECEC sector, with a workforce that lacks gender parity, reflecting historic views of childcare as women's work.

Public and private ECEC settings differ in the children and locations served, and in some aspects of quality

In all countries and subnational entities, ECEC leaders report a mix of public and private setting management (see Chapter 3). These different types of settings are not equally distributed, with more public than private settings in rural areas and in neighbourhoods rated as less favourable by leaders in several countries and subnational entities. Leaders in public settings in many systems also report less adequate physical space (e.g. ventilation, background noise) for their ECEC settings compared with their colleagues in private settings. In a few countries and subnational entities, leaders in public settings also report less communication with families than their colleagues in private settings (see Chapter 9). In addition, in many systems, public ECEC settings serve higher shares of vulnerable children, for example children from socio-economically disadvantaged homes (Table 1.3, Indicator 3.1), from migrant backgrounds, whose home language is different from the language used at the ECEC setting and those with special education needs. On the other hand, leaders in public and private settings generally report similar levels of external monitoring, such as to ensure facilities meet health and safety requirements, regulations are being followed, and to assess the quality of interactions with children (i.e. process quality; Table 1.3, Indicator 3.2). An exception in some countries and subnational entities is financial monitoring (e.g. audits), which is more common for private ECEC settings than for public ones, reflecting their different funding profiles and, in some cases, profit goals (see Chapters 3 and 9).

Countries and subnational entities need to ensure quality and equal access to ECEC in the presence of private provision and allocate sufficient resources to public settings given their greater share of vulnerable children. Private ECEC provision can be essential to expand the ECEC supply, allowing more children to participate in these programmes; however, policies need to be designed to ensure that the combination of private and public provision does not lead to inequality in access to or the quality of ECEC. This is particularly important as, in several ECEC systems, both public and private

settings, including for-profit ones, receive funding from the government (see Chapter 3), reflecting that governments build on both types of provision to achieve equity and quality goals. TALIS Starting Strong 2024 findings echo those of other studies, highlighting that public and private provision are often operating in very different contexts within the same systems. However, in the Flemish Community of Belgium for both levels of ECEC, pre-primary settings in Norway, and settings for children under age 3 in Germany and Quebec (Canada), there are no apparent differences in the geographical distribution and structural features of quality between publicly and privately managed settings. In addition, at both levels of ECEC in the Flemish Community of Belgium and Germany, no differences are found in the shares of vulnerable children in these two types of ECEC settings. In other countries where publicly managed settings enrol higher shares of vulnerable children, policies can focus on ensuring that these settings have sufficient and targeted resources to provide quality ECEC through adequate staffing levels with a well-trained workforce; stronger co-operation between ECEC settings and health, family and social services; and good engagement with families, as discussed in previous sections.

Leaders support staff's high-quality practices with children and mitigate their stress, yet need more support themselves, including through streamlined administrative processes and regulations

Both staff satisfaction with leadership and their engagement in professional collaborative practices, which are shaped by their collaboration with leaders, are associated with staff's use of more high-quality practices with children (see Chapters 7 and 9). Satisfaction with leadership is also a key resource that buffers staff from stress (see Chapter 8). Yet there is wide variation across countries and subnational entities in the proportion of leaders who regularly provide feedback to staff (Table 1.3, Indicator 3.3), which could act as a driver of internal quality improvement practices. This type of leadership responsibility likely benefits from specific training to implement, but initial training on human resource management is only relatively common in pre-primary settings in Colombia, Morocco, Sweden and Türkiye, where about 75% or more of leaders report having covered this topic. Furthermore, in most countries and subnational entities, participation in collaborative forms of professional development, such as coaching, is limited among leaders. At the same time, a majority of leaders report needing greater support from local, regional or national authorities (Table 1.3, Indicator 3.4), and high percentages of them report that having too much administrative work to do and keeping up with changing requirements from authorities as main sources of stress. These findings indicate that governance features of the ECEC sector create challenges for leaders.

Providing leaders with high-quality professional development opportunities and effective administrative processes and regulations can help them attend to all aspects of their job. Training on key leadership areas can build their capacity to provide feedback and guide pedagogical practices among staff, ultimately improving quality for children and families. Leaders in pre-primary settings in Chile and Japan and at both levels of ECEC in Germany are particularly likely to have had recent access to coaching (Table 1.3, Indicator 3.5). Links between leadership practices and staff engagement in collaborative practices are also particularly evident in pre-primary settings in both Chile and Germany, highlighting the potential for support for leaders to contribute to positive practices among staff (see Chapter 9).

The structure of the workforce contributes to high rates of staff absences while part-time work can enable staff to balance work and family life

The highly gendered ECEC workforce (more than 85% of staff are women in all countries and subnational entities) likely contributes to the high rates of staff absences reported by ECEC leaders (see Chapter 3): Women tend to bear more responsibilities for family care needs, particularly when working in low-wage jobs (ILO, Statistics Department, 2024^[7]; OECD, 2023^[8]). Short-term absences related to family responsibilities can compound with longer term planned absences, such as for maternity leave, to create

staffing instability that hinders ECEC settings' capacity to provide high-quality ECEC and contributes to staff stress, as discussed above (see also Chapter 8). Indeed, in a majority of countries and subnational entities, attending to family responsibilities is among the top reasons to leave the ECEC staff role in the next five years (Table 1.3, Indicator 3.6), underscoring the impact care responsibilities have on the ECEC workforce. Nonetheless, there is substantial variability across countries and subnational entities, with fewer staff endorsing this reason to leave their roles in pre-primary settings in Denmark and the Flemish Community of Belgium. Also in these two systems, there are relatively high rates of part-time work among ECEC staff, who further indicate they work part time because they were only looking for part-time work (e.g. due to health reasons, family commitments or further education). This finding suggests that in some contexts, a preference for part-time employment in the ECEC sector may be compatible with balancing the different demands of employment and care obligations at home.

Building pools of replacement staff and a better or more flexible allocation of human resources across settings can alleviate the burden that planned and unplanned absences place on ECEC settings. The gendered structure of the ECEC workforce, coupled with relatively low pay, means there will be frequent absences that require systematic planning to address. While larger businesses are well-equipped to navigate care leaves (OECD, 2023^[8]), the small nature of ECEC settings in many countries and subnational entities (see Chapter 3) can create unmanageable levels of instability if not addressed through support from wider networks of ECEC services with planning and oversight from responsible government authorities. In Japan and Spain, less than 20% of pre-primary leaders indicate staff absences as a hindrance to the quality of the ECEC environment (Table 1.2, Indicator 2.1). These are also countries where having extra duties due to absent staff is not among the major sources of stress, in contrast with many other systems (see Chapter 8).

Table 1.3. Data overview: Strong foundations for early childhood education and care

	3.1. Percentage point gap in the share of private and public settings with 10% or more of children from socio-economically disadvantaged homes	3.2. Percentage of leaders who report receiving external inspection/monitoring of staff practices by trained observers less than every two years or never	3.3. Percentage of leaders who provide feedback to staff based on their observations weekly or more often	3.4. Percentage of leaders who "agree" or "strongly agree" that they need more support from their local, municipality, regional, state or national/federal authorities	3.5. Percentage of leaders who received coaching in the 12 months prior to the survey	3.6. Percentage of staff who report they are "likely" or "very likely" to leave their ECEC staff role to attend to family responsibilities
Pre-primary settings (ISCED level 02)						
Chile	-11	36	53	76	65	41
Colombia	-16	28	54	86	30	52
Denmark		10	65	36	24	17
Finland	-5	67	44	33	21	19
Flemish Comm. (Belgium)	-4	83	13	69	31	16
Germany*	-5	73	55	59	41	33
Ireland*		24	56	70	21	49
Israel		19	63	67		46
Japan	0	53	42	85	43	64
Morocco	-14	40	32	85	34	53
Norway*	-2	74	34	63	10	20
Spain	-14	36	39	81	31	27
Sweden	-18	79	12	37	15	
Türkiye	-39	32	33	83	17	32
<i>New Zealand**</i>		68	46	54		43
Settings for children under age 3						
Flemish Comm. (Belgium)*	-18	74	20	62	33	30
Germany	-11	73	53	58	37	37
Ireland*		23	52	76	17	52
Israel	-12	1	78	71		47
New Brunswick (Canada)*		3	55	63	19	41
Norway*	-12	67	27	64	9	23
Quebec (Canada)*		40	40	48	28	40
<i>New Zealand**</i>		39	58	58		51

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Negative values for Indicator 3.1 indicate that more public settings than private settings within the country or subnational entity have 10% or more of children from socio-economically disadvantaged homes; positive values indicate more private settings than public settings have 10% or more of children from socio-economically disadvantaged homes.

ECEC: early childhood education and care.

Within each indicator, the percentages indicating the most favourable outcomes across countries and subnational entities (with the exception of New Zealand**) within each level of ECEC are indicated in darker shades and the percentages indicating the least favourable outcomes are indicated in white. Intermediate percentages are indicated in intermediate shades. Grey indicates low survey coverage or missing data. Missing values are due to the question not being administered, having too few observations to ensure reliability or because all ECEC settings are officially privately managed (see Box 3.2).

For Indicator 3.1, the smallest gaps between public and private settings (whether positive or negative) are indicated in darker shades and largest gaps are indicated in white.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.3.18, D.7.1, D.7.9, D.8.15, Leader.32 and Leader.34.

StatLink  <https://stat.link/5msnav>

References

- Farquharson, C. (2025), “A response to the government’s Best Start in Life strategy [Comment]”, Institute for Fiscal Studies, <https://ifs.org.uk/articles/response-governments-best-start-life-strategy> (accessed on 8 September 2025). [6]
- ILO, Statistics Department (2024), *The Impact of Care Responsibilities on Women’s Labour Force Participation*, International Labour Organization, Geneva, <https://doi.org/10.54394/lptt5569>. [7]
- Leseman, P. and P. Slot (2025), “Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses”, *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [1]
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care, Starting Strong*, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>. [2]
- OECD (2023), *Joining Forces for Gender Equality: What is Holding Us Back?*, OECD Publishing, Paris, <https://doi.org/10.1787/67d48024-en>. [8]
- OECD (2021), *Starting Strong VI: Supporting Meaningful Interactions in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/f47a06ae-en>. [4]
- OECD (2018), *Engaging Young Children: Lessons from Research about Quality in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/9789264085145-en>. [3]
- Pereira, M. et al. (2025), “Time and routines organization in early childhood education and care: Participation, opportunities, and constraints”, *Journal of Research in Childhood Education*, pp. 1-20, <https://doi.org/10.1080/02568543.2025.2461545>. [5]

2 Building a strong early childhood education and care workforce

This chapter describes the early childhood education and care (ECEC) workforce, including both staff and leaders. It discusses the demographic characteristics of the workforce as well as their initial education and training and work experience. The chapter also portrays the employment conditions of staff and leaders, including their contractual status and working hours. These characteristics and profiles help interpret results from the survey throughout the report while also pointing to key areas of strong ECEC.

Key findings

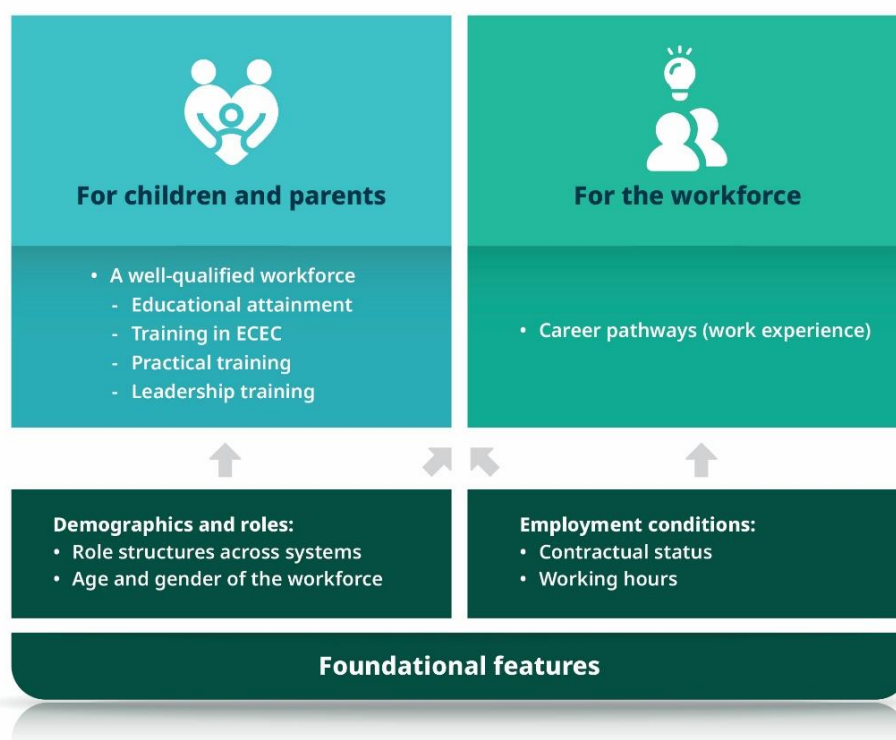
- **Many countries and subnational entities rely on a mix of teachers and assistants while others rely mainly on teachers.** In six systems at the pre-primary level and five at the level of children under age 3, more than 80% of staff are teachers. In the remaining systems, around half of staff are teachers and the other half are mainly assistants, with two exceptions: 1) Spain (pre-primary settings), where around one-third of staff report their role is either to work with individual children or for special tasks; and 2) Israel (pre-primary settings), where the majority of staff who are not setting leaders are assistants.
- **ECEC staff are mostly women, with some countries and subnational entities and leadership positions in pre-primary settings attracting more men.** Only in pre-primary settings in Colombia, Denmark and Morocco are more than 10% of staff men. Men are also rare among leaders in settings for children under age 3 but they represent a higher share of leaders in pre-primary settings.
- **The age structure of staff varies by country or subnational entity.** At the pre-primary level in Japan, Morocco and Türkiye; in settings for children under age 3 in the Flemish Community of Belgium and New Brunswick (Canada); and both levels of ECEC in Germany and Ireland, there are higher shares of younger staff (under age 30). At the pre-primary level in Colombia, Denmark, Finland, Israel, Norway, Spain and Sweden, there are higher shares of older staff (aged 50 or older).
- **Although it is not universal, most staff are trained to work with children.** Around 90% or more of staff are trained to work with children, with a slightly lower share in pre-primary settings in Morocco and in settings for children under age 3 in the Flemish Community of Belgium, Israel and Norway. A majority of staff also have some post-secondary education in all countries and subnational entities, except in settings for children under age 3 in the Flemish Community of Belgium. Staff's education profiles are generally mixed, with three exceptions: nearly all pre-primary staff in Spain and more than 80% of staff in the Flemish Community of Belgium and Türkiye have a bachelor's degree or equivalent or higher.
- **Leaders tend to have substantial previous work experience with children.** This experience is acquired in other roles in ECEC settings and in other pedagogical/educational roles with children, suggesting a variety of pathways into leadership roles.
- **Staff in most systems have predominately permanent contracts, but this is more often the case for teachers than assistants, and for full-time workers than part-time ones.** Except for pre-primary settings in Colombia and Morocco, which use fixed-term contracts widely, approximately 70% of staff or more in each country or subnational entity have a permanent contract. These permanent contracts are more common among teachers than assistants and for full-time workers than for part-time workers in some systems. These findings indicate that some terms of the employment contract that result in lower job security tend to accumulate on some ECEC staff.
- **Part-time work is prevalent and chosen in several ECEC systems.** Settings in both levels of ECEC in the Flemish Community of Belgium, Germany, Ireland and Israel, as well as pre-primary settings in Denmark and New Zealand**, have about a third of staff or more who work part time. In these systems, staff who work part time tend to report that this is the case because they were looking for part-time work (e.g. due to health reasons, family commitments or further education). In contrast, in pre-primary settings in Chile, Morocco, Spain and Türkiye, 20% or more of staff work part time, but staff tend to report this was because they were only offered part-time work (e.g. only part-time hours available, limited opening hours of the setting).

ECEC staff and leaders are at the heart of a strong system. Their backgrounds and characteristics influence their practice and their capacity to adapt to new challenges, shaping how ECEC systems function and support children and their families (Eadie et al., 2024^[1]; Leseman and Slot, 2025^[2]; Nutbrown, 2021^[3]; OECD, 2019^[4]). Countries design their ECEC systems differently (see Chapter 3), with implications for the mix of staff profiles needed to address key policy goals. Within systems, growing attention to the importance of a well-trained, professional workforce in ECEC settings must be reconciled with the funding available for the sector, the qualifications of the existing workforce and societal expectations around who should provide ECEC. As systems grapple with these issues, ECEC staff shortages are a pressing concern in many places, highlighting the need for innovative strategies to attract, retain and develop a high-quality workforce, prepared to adapt to evolving challenges in the sector. Understanding the characteristics and employment conditions of the ECEC workforce is therefore essential to plan for the future.

The Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024 is the only internationally comparable source of information coming directly from ECEC staff and leaders. It asks about their demographic characteristics, educational and professional background, and employment and working conditions. This chapter provides an overview of the profiles of ECEC staff in participating countries and subnational entities by addressing the following questions:

- What are the demographic, educational and professional backgrounds of ECEC staff and leaders?
- What different staff roles are present in ECEC settings across countries and subnational entities?
- What are the employment conditions, including full-time or part-time working hours and contractual status, of the ECEC workforce?

Figure 2.1. Analytical framework for building a strong early childhood and education care workforce



Understanding demographic profiles and staff roles in early childhood education and care settings

The configuration of staff roles and the diversity of staff's backgrounds shape children's daily experiences in their ECEC settings and have implications for recruitment needs (OECD, 2019^[4]). Establishing complementary competence profiles and adopting strategies to attract more diverse staff to the profession can help address all children's needs while expanding the pool of potential candidates and enhancing working conditions for staff in all roles (McDonald, Coles and Thorpe, 2024^[5]; Peeters, Sharmahd and Budginaité, 2018^[6]; Wilkinson, Davies and Warin, 2024^[7]). A key move in this direction is attracting more men to the profession – along with addressing the gendered perception of ECEC tasks. Understanding the age structure of the workforce is important to plan for expected retirement from the field, as well as anticipating needs to attract younger people to the profession.

TALIS Starting Strong 2024 asks staff to describe their primary role in their ECEC setting with seven international categories: leader, teacher, assistant, staff for individual children, staff for special tasks, intern or other. The ECEC setting leader, the person with the most responsibility for the administrative, managerial and/or pedagogical leadership, is not asked this question. The survey also collects information from staff and leaders on their gender and age.

Many countries rely on a mix of teachers and assistants as categories of staff in ECEC settings, while some rely primarily on teachers

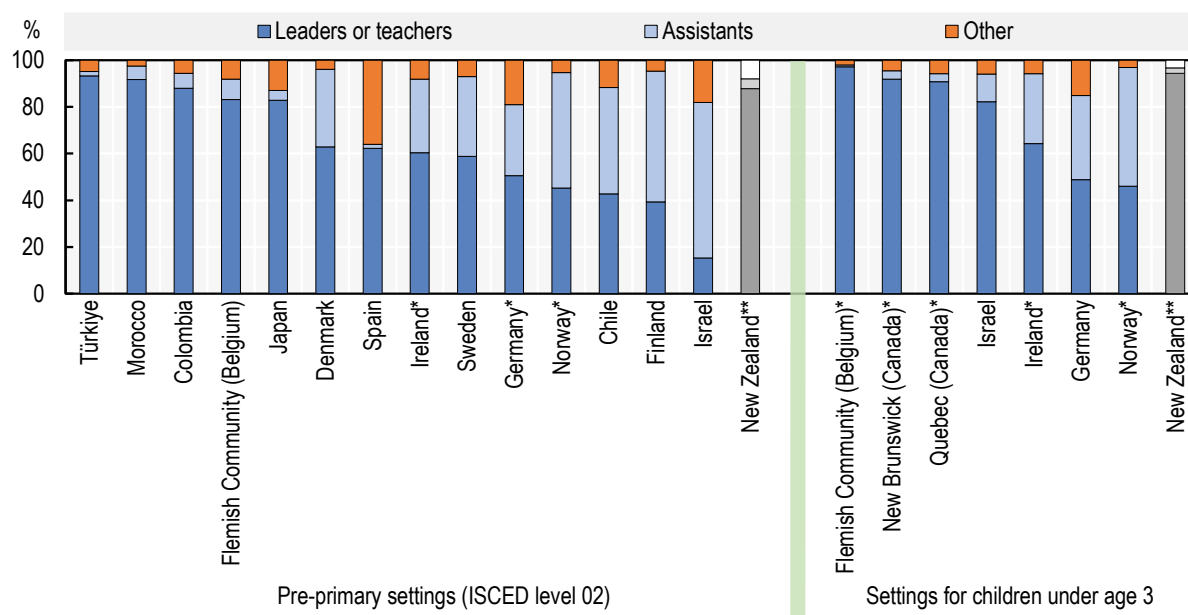
In eight of the participating countries and subnational entities at the pre-primary level, around 40% to 60% of staff describe their role in the ECEC setting as a teacher or leader, whereas in six of the countries and subnational entities teachers and leaders represent over 80% of staff (Figure 2.2). Among settings for children under age 3, there are only three systems where 40-60% of respondents describe their role in the ECEC setting as a teacher or leader and five countries and subnational entities with 80% or more of staff describe themselves as teachers or leaders. Given that there is a share of staff who identify as leaders in most countries and subnational entities, separately from the main ECEC setting leader, responses suggest that aspects of leadership can be shared among staff within ECEC settings, with variations between countries and subnational entities. This can be the case when there is a deputy leader in the ECEC setting, when teachers take on leading pedagogical roles or, more generally, in settings with more distributed leadership (see Chapter 7). For this reason, throughout this report, staff who describe themselves as leaders are grouped together with those who describe themselves as teachers and are collectively referred to as “teachers”.

With two exceptions, in countries and subnational entities where teachers represent only about half of ECEC staff, the remainder of staff are predominantly assistants (seven countries and subnational entities at the pre-primary level and three at the level for children under age 3; Table D.2.1). The first exception is Spain, where besides around 60% of staff who report working as teachers, 15% report their role as staff for individual children and another 19% indicate they are staff for special tasks.

The other exception is pre-primary settings in Israel, which have an overall different staffing approach than the other systems, with roughly two-thirds of staff reporting they are assistants. This reflects the structure of the pre-primary system in Israel, where settings are quite small in terms of the number of children enrolled (see Chapter 3) and the main administrative leaders of these settings are also teachers. The different profiles of staff roles across countries and subnational entities suggest that responsibilities within settings and within groups may also be shared differently across systems.

Figure 2.2. Staff roles in early childhood education and care settings

Percentage of staff by role, based on staff reports



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Note: Leaders without staff duties and leaders with staff duties who were identified as the person with the most responsibility for the administrative, managerial and/or pedagogical leadership in the ECEC setting did not respond to this question.

Countries and subnational entities, except New Zealand, are ranked in descending order by the percentage of staff who are leaders or teachers.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table Staff.3.

StatLink  <https://stat.link/Ohnliu>

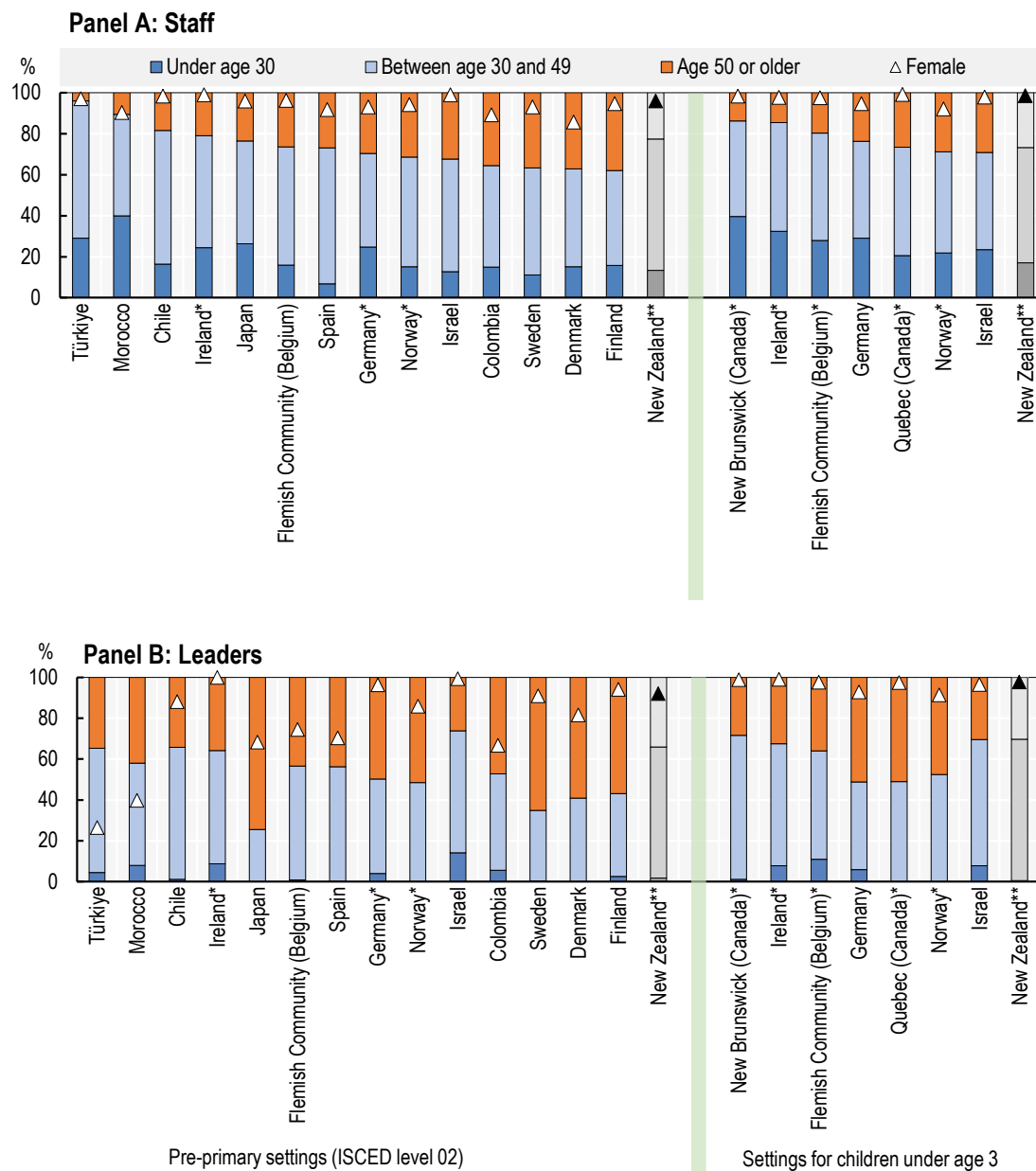
ECEC staff are predominantly women, but men are an important minority of staff in some countries and more common in leadership roles

Across participating countries and subnational entities, the vast majority of ECEC staff are female. However, in pre-primary settings in Colombia, Denmark and Morocco, around 10% or more of staff are male (Figure 2.3). In pre-primary settings in Denmark, the proportion of men in assistant roles is even higher: more than 20% (Table D.2.2). There is a concerted effort in Denmark to attract men to assistant roles by offering training that facilitates career transitions (Peeters, Sharmahd and Budginaité, 2018^[6]). Men are also more represented among staff for special tasks compared to other roles in pre-primary settings in Chile, the Flemish Community of Belgium, Spain and Türkiye, although staff in this role represent only a small share of staff in these countries and subnational entities, except in Spain.

ECEC setting leaders are also predominantly women in most participating countries and subnational entities, although there are often more men in leadership roles compared to men in staff roles in pre-primary settings. For settings for children under age 3, the proportion of women among leaders is similar to the proportion of women among staff (Tables D.2.2 and D.2.3).

Figure 2.3. Age and gender of early childhood education and care staff and leaders

Percentage of staff and leaders by age group and gender, based on staff and leader reports



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Countries and subnational entities, except New Zealand, are ranked in ascending order according to the percentage of staff aged 50 or older. Source: OECD (2025), TALIS Starting Strong 2024 Database, Tables D.2.2, D.2.3 and D.2.4.

StatLink  <https://stat.link/kaso2m>

Box 2.1. Attracting staff to the early childhood education and care workforce

Since the introduction of the Act on Good Early Childhood Education and Care (2019-2022), Germany's federal states have been focusing on improving the early childhood education and care (ECEC) system (BMBFSFJ, 2025^[8]). This has been pursued by identifying several fields of action and letting federal states prioritise investing in those the most pertinent to their context. Alongside this act, a federal programme called the "Skilled Labour Initiative: Attracting young talent, retaining professionals in early education" was implemented. With the Childcare Quality Act (2023-2025), funding was expanded and actions to recruit and retain qualified teaching staff became mandatory. Whereas in other countries and subnational entities in TALIS Starting Strong 2024 interns account for less than 2% of the ECEC workforce, in Germany they account for around 8% of staff in settings for children under age 3 and around 10% in pre-primary settings. This greater engagement of interns in the ECEC workforce reflects the emphasis put on practical training to prepare ECEC staff for their roles while simultaneously addressing staff shortages in the sector (Table D.2.1).

In Denmark, training for educators allows for flexibility that can help to attract staff to the profession. "Pedagogues" are trained in a professional bachelor's degree with a practical component and a general orientation towards welfare that allows graduates to work in multiple types of institutions (Eurydice Unit, 2025^[9]; Peeters, Sharmahd and Budginaité, 2018^[6]). The training programmes also have quotas for untrained but experienced workers (merit education). Assistants often have upper-secondary vocational training to be "assistant pedagogues" and often work for some years before pursuing a qualification as a pedagogue. This pathway is attractive as it entails responsibilities and remuneration (Peeters, Sharmahd and Budginaité, 2018^[6]). TALIS Starting Strong 2024 shows that, in Denmark, around 28% of assistants are under age 30, compared to only 8% of teachers (Table D.2.4). This reflects the high numbers of assistants who work after vocational upper-secondary training and are a source of recruitment for the more qualified and stable roles of "pedagogues" later.

The generalist nature of the programme and the flexible pathways have also helped attract male students, which is reflected in the fact that around 15% of assistants in Denmark are men in the TALIS Starting Strong 2024 data – the highest across all countries and subnational entities (Table D.2.2). Nonetheless, the overall attractiveness of the pedagogue training is declining (Koch and Jensen, 2024^[10]). To counter this trend, the national government has allocated funds to municipalities, which are supporting merit education, among other policies, to increase the number of applicants.

ECEC staff age varies by role and level of ECEC

Most ECEC staff are 30-49 years old in all participating countries and subnational entities, followed by the share of staff that are 50 years or older, with staff under age 30 being the minority (see Figure 2.3). Nevertheless, at the pre-primary level in Japan, Morocco and Türkiye; settings for children under age 3 in the Flemish Community of Belgium and New Brunswick (Canada); and at both levels of ECEC in Germany and Ireland, there are comparatively large shares (about 25% or more) of young staff under 30 years old. This suggests that these systems have successfully generated interest in the sector from younger cohorts, but could also be failing to retain workers as they progress in their careers. In contrast, at the pre-primary level in Colombia, Denmark, Finland, Israel, Norway, Spain and Sweden, there are relatively fewer young staff and about 25% or more of staff aged 50 or older, indicating a potentially greater forthcoming need to recruit in these countries. Assistants generally tend to be younger than teachers at the pre-primary level, with higher shares under age 30 in most countries and subnational entities. However, at the pre-primary level in Israel and Norway, there is a greater share of assistants aged 50 or older compared to teachers (Table D.2.4).

Staff also tend to be younger in settings for children under age 3 than in pre-primary settings. In settings for children under age 3, there are generally higher shares of staff under age 30 (Figure 2.3) and the mean age for staff in these settings is lower than that for staff in pre-primary settings in five of the six systems with data for both levels of ECEC (Table Staff.2).

As for staff, most ECEC setting leaders are 30-49 years old (Table D.2.3). Nevertheless, unlike staff, leaders tend to have the same age distribution in both ECEC levels; this is the case in the six systems with data at both levels. Also, unlike staff, almost no leaders are aged 30 or younger. Furthermore, the proportion of leaders aged 50 and older is higher than for staff in all countries and subnational entities except for both ECEC levels in Israel, pointing to the need to also recruit leaders. However, since leaders tend to have previous experience in ECEC roles, this also means that opening pathways for staff to move into leadership roles is an opportunity for leader recruitment and staff career progression. In systems where higher shares of staff are older, such as pre-primary settings in Colombia, Denmark, Finland, Israel, Norway, Spain and Sweden, this pathway from staff roles to leadership might not suffice to replace leaders that are retiring and alternative strategies for attracting both staff and leaders may be needed. In addition, the career pathways for becoming a leader may not always be evident for staff (see Chapter 8), potentially limiting the ability of ECEC systems to fill this crucial role with qualified candidates.

Preparing a strong workforce: Initial education and training of staff and leaders in early childhood education and care

Staff's initial education and training is a key factor to build a strong ECEC workforce, providing foundational knowledge and opportunities for practice that staff need to support children's development, learning and well-being as they enter their careers (Nutbrown, 2021^[3]). Strong initial education for ECEC staff is associated with several aspects of process quality as well as outcomes for children (Beisly and Lake, 2021^[11]; Fukkink et al., 2019^[12]; Geißler et al., 2022^[13]; Manning et al., 2019^[14]; OECD, 2019^[4]). Having some post-secondary education and covering topics specifically related to ECEC are linked to better quality (Lin and Magnuson, 2018^[15]). Likewise for leaders, higher education levels are associated with better outcomes for children and staff, such as classroom quality (Drake et al., 2023^[16]). As with staff roles, ECEC systems have different profiles for staff and leader education and training requirements. While extant research highlights the importance of having a workforce that is well-prepared for the demands of work in the ECEC sector to support quality for children and retention in field, the type of training to meet these goals may look different across countries and subnational entities.

TALIS Starting Strong 2024 asks staff about their highest educational attainment, whether they received training specifically to work with children and, if so, whether practical training was included in their training to work with children. The survey also asks leaders about their educational attainment and whether four content areas were covered in the education and training they have completed: 1) early childhood development, well-being and learning; 2) financial management; 3) human resource management; and 4) pedagogical leadership. This section covers these aspects of leaders' education and training, whereas the content of staff education and training is covered in greater detail in Chapter 6. Chapters 6 and 7 discuss the ongoing professional development of staff and leaders, respectively.

Most staff had initial training to work with children, although this is not universal

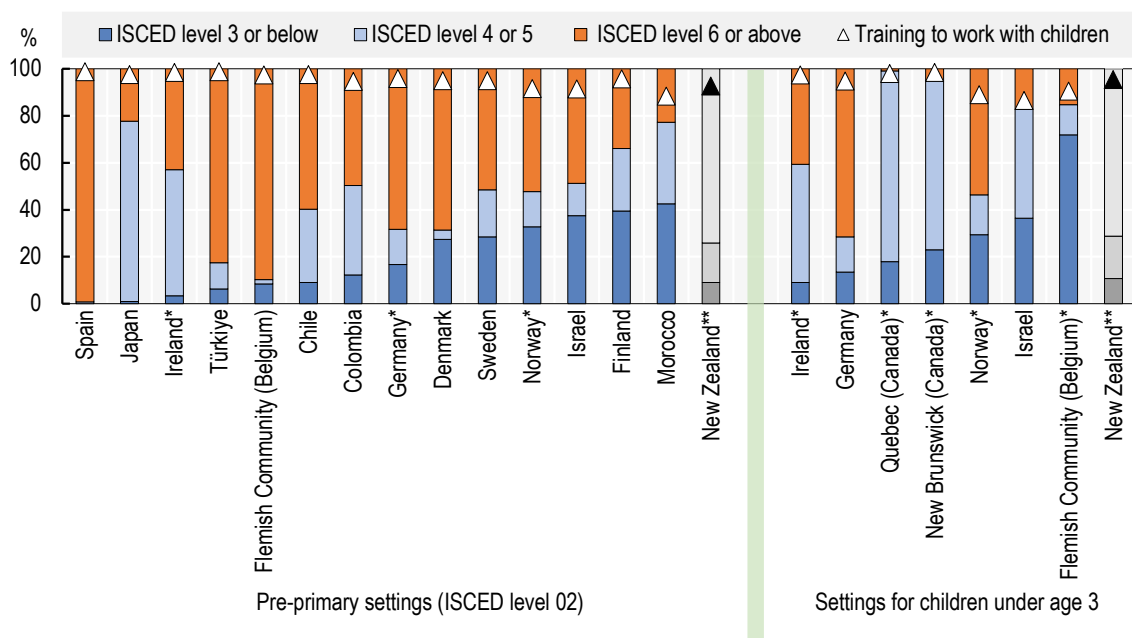
In most countries, over 90% of ECEC staff have completed programmes that included training specifically to work with children (Figure 2.4). Although this share is high in all participating countries and subnational entities, there is a small share of staff who did not have training to work with children before entering the ECEC sector, ranging from under 2% in pre-primary settings in Ireland, Spain and Türkiye, and in settings for children under age 3 in New Brunswick (Canada), to around 10% or more in pre-primary settings in

Morocco and in settings for children under age 3 in the Flemish Community of Belgium, Israel and Norway (Table D.2.5).

In most countries and subnational entities, the majority of staff have some post-secondary education (ISCED level 4 and above), with strong variation in the educational attainment between systems (Figure 2.4). For example, nearly all pre-primary staff in Spain and more than 80% of staff in pre-primary settings in the Flemish Community of Belgium and Türkiye have a bachelor's degree or equivalent, or higher (ISCED level 6 and above). In contrast, more than a third of staff in pre-primary settings in Finland and Morocco and both levels of ECEC in Israel only have secondary education or less (ISCED level 3 or below) as their highest level of educational attainment; this is the case for over 70% of staff in settings for children under age 3 in the Flemish Community of Belgium (Table D.2.6). Some systems also rely on post-secondary vocational and short-cycle tertiary education (ISCED levels 4 and 5): high shares of staff in pre-primary settings in Ireland and Japan, and in settings for children under age 3 in Ireland, New Brunswick (Canada) and Quebec (Canada) have these qualifications.

Figure 2.4. Early childhood education and care staff's educational attainment and content of their initial training

Percentage of staff in each category of highest educational attainment and whether they received training specifically to work with children, based on staff reports



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: Respondents in the "ISCED level 3 or below" group are those whose highest education is at a secondary level or below. Respondents in the "ISCED level 4 or 5" group are those whose level of highest education is beyond secondary schooling but less than a bachelor's degree (or equivalent), including post-secondary non-tertiary education (generally vocationally oriented) and short-cycle tertiary education. Respondents in the "ISCED level 6 or above" group are those whose highest level of education is at the level of a bachelor's degree or equivalent or higher. Countries and subnational entities, except New Zealand, are ranked in ascending order according to the percentage of staff with ISCED level 3 or below educational attainment.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Tables D.2.5 and D.2.6.

A lower share of staff in settings for children under age 3 have a bachelor's degree or equivalent or above (ISCED level 6 or above) compared to their peers in pre-primary settings (Table D.2.6). This is especially evident in split, or historically split, systems, such as the Flemish Community of Belgium and Israel, where settings for children under 3 and pre-primary settings have different regulations and oversight. Both Canadian provinces also have split ECEC systems, although data are not available in TALIS Starting Strong 2024 for the pre-primary level in these contexts. In contrast, the fully integrated ECEC systems in Germany and Norway, which serve children from infancy until they begin primary school, have the same educational attainment among staff at both levels of ECEC (see Annex A).

Educational attainment among staff differs by role. In all participating countries and subnational entities that rely on a mix of teachers and assistants at the pre-primary level, and most at the level of children under age 3 (see Figure 2.2), teachers are more likely to have a bachelor's degree or equivalent or above (ISCED level 6 or above) than assistants (Table D.2.6).

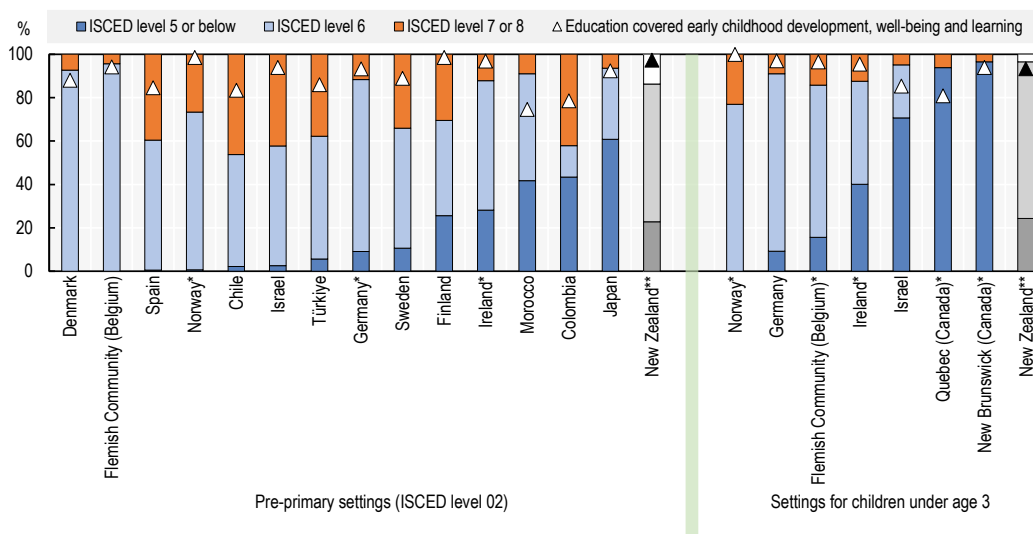
Among staff who are trained to work with children, this training generally included a practical component, regardless of the level of qualification in most countries and subnational entities (Table D.2.5). Although practical training is very common among staff, it is sometimes more frequent among teachers than among assistants, with gaps in pre-primary settings in Denmark, Finland and Sweden and in settings at both levels in Norway. In these countries, assistants also had initial training specifically to work with children less often than teachers. However, these gaps are not present in all other systems that rely on a mix of these roles. In systems where assistants have a lower educational attainment than teachers but similar rates of training to work with children, there is not generally a difference between teachers and assistants receiving practical training. This suggests that ECEC content and practical components can be fully incorporated into programmes at different levels of qualification.

Leaders' educational attainment is often higher than that of staff but not necessarily targeted to ECEC leadership

For leaders of pre-primary settings, it is common to have a bachelor's degree or equivalent or higher (ISCED level 6 or above). Furthermore, in settings at this level, about 30% or more of leaders in Chile, Colombia, Finland, Israel, Spain, Sweden and Türkiye have a master's degree or equivalent or higher (ISCED level 7 or above; Figure 2.5). For leaders of settings for children under age 3, most likewise have a bachelor's degree or equivalent or higher (ISCED level 6 or above). However, in pre-primary settings in Japan and in settings for children under age 3 in Israel, New Brunswick (Canada) and Quebec (Canada), for a majority of leaders, the highest educational attainment is post-secondary vocational or short-cycle tertiary qualifications (ISCED level 4 or 5; Table Leader.3). This reflects typical staff educational attainment in these countries and subnational entities. Leaders' qualifications also align with typical staff qualifications in pre-primary settings in Chile, Denmark and Finland, and in settings at both levels of ECEC in Germany and Norway (Table D.2.6; Table D.2.7). Overall, these results suggest that transitions from teacher to leader roles are possible, given the similar educational attainment profiles. Transitions from assistant to teacher or leader seem more complicated given the differences in educational attainment profiles, which would therefore more often require staff to acquire higher qualifications.

Figure 2.5. Early childhood education and care leaders' educational attainment and content of their training

Percentage of leaders in each category of highest educational attainment and whether they received training in early childhood development, well-being and learning, based on leader reports



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Respondents in the "ISCED level 3 or below" group are those whose highest education is at a secondary level or below. Respondents in the "ISCED level 4 or 5" group are those whose highest level of education is beyond secondary schooling but less than a bachelor's degree (or equivalent), including post-secondary non-tertiary education (generally vocationally oriented) and short-cycle tertiary education. Respondents in the "ISCED level 6" group are those whose highest level of education is at the level of a bachelor's degree or equivalent. Respondents in the "ISCED level 7 or 8" group are those whose highest education is at the level of a master's or doctoral degree.

Countries and subnational entities, except New Zealand, are ranked in ascending order according to the percentage of leaders with ISCED level 5 qualifications or below.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.2.7 and Leader.4.

StatLink  <https://stat.link/k7uc3p>

As part of their education, more than three-quarters of leaders covered early childhood development, well-being and learning (Table Leader.4; Figure 2.5). This suggests that ECEC leaders are generally trained to work in early childhood contexts. However, there is important variation across countries and subnational entities in the proportion of leaders who did not cover this area in their education: while it is nearly universal among pre-primary leaders in Finland and at both levels of ECEC in Norway, over 20% of leaders in pre-primary settings in Colombia and Morocco did not cover this area in their education.

Among other topics that leaders covered in their education and training programmes, pedagogical leadership is the next most common, followed by human resource management; the least frequent topic covered was financial management, which is covered by only around half or less of leaders in most countries and subnational entities (Table Leader.4). Training on pedagogical leadership ranges from about 50% of leaders in settings at both levels in Germany and New Zealand** and settings for children under age 3 in Quebec (Canada) to more than 90% of leaders in pre-primary settings in Chile, Japan and Sweden and at both levels of ECEC in Norway. This may reflect differences in whether ECEC leaders prepare for leadership from their initial stages of education, versus developing leadership-specific skills throughout their career in the ECEC sector. Likewise, having training on human resource management is relatively common only in pre-primary settings in Colombia, Morocco, Sweden and Türkiye where about 75% or more of leaders report covering this topic.

Leaders in pre-primary settings in Morocco and in settings for children under age 3 in Quebec (Canada) report the highest rates of training that included financial management, with over 60% of leaders indicating they had this type of training. The prevalence of financial management training in Quebec (Canada) may be linked to the important role home-based settings play in ECEC provision for children under age 3 in this province: individuals preparing to open their own settings may be particularly likely to engage in financial management training in preparation for operating their own ECEC business. Likewise, in Morocco, ECEC leaders in pre-primary settings often work independently, likely creating a strong incentive to prepare for this aspect of administrative leadership.

Mapping career stages: Work experience of ECEC staff and leaders

More experienced staff bring stability to the ECEC sector as well as accumulated knowledge and skillsets; however, given the balance of job rewards and demands in the sector (see Chapter 8) as well as the need for ongoing professional development (see Chapter 6), experience on its own is not a clear predictor of quality in ECEC (McMullen et al., 2020^[17]). In elementary and middle school education, teacher experience has a non-linear effect on students' schooling outcomes, with decreasing but positive marginal benefits (Harris and Sass, 2011^[18]); a similar pattern could be expected among ECEC staff, with the first few years working in the sector being a time for learning the profession and turning knowledge from initial education into practice. Although work experience is not easy to separate from other drivers of skill development (McMullen et al., 2020^[17]), such as ongoing training or role changes, several studies have found it is associated with positive aspects of staff-child interactions (Banghart et al., 2020^[19]; Geißler et al., 2022^[13]; Leseman and Slot, 2025^[2]). Like for staff, leaders' work experience is associated with different styles of leadership, as leaders build on their previous experiences to shape their practice. For example, a Canadian study found that leaders who have more experience conduct less formal performance evaluations since they might rely on other, more informal strategies to lead (Perlman et al., 2020^[20]).

TALIS Starting Strong 2024 asks staff and leaders about their years of work experience, in terms of both years in the ECEC sector and years in other education-related fields aside from ECEC settings. In the case of leaders, this also includes previous years of experience in ECEC settings in roles other than as a leader. This section summarises staff's and leaders' work experience in these areas. Chapter 6 discusses further implications for novice staff (those with three years of experience or less).

Some countries and subnational entities have high shares of novice staff at all ages

Across countries and subnational entities, staff's average number of years of experience as ECEC staff range from less than 10 years in pre-primary settings in Morocco and Türkiye, settings for children under age 3 in New Brunswick (Canada), and settings at both levels in Ireland to about 14 years or more in settings at both ECEC levels in Germany and pre-primary settings in the Flemish Community of Belgium, Japan, Norway and Sweden (Table D.2.8).

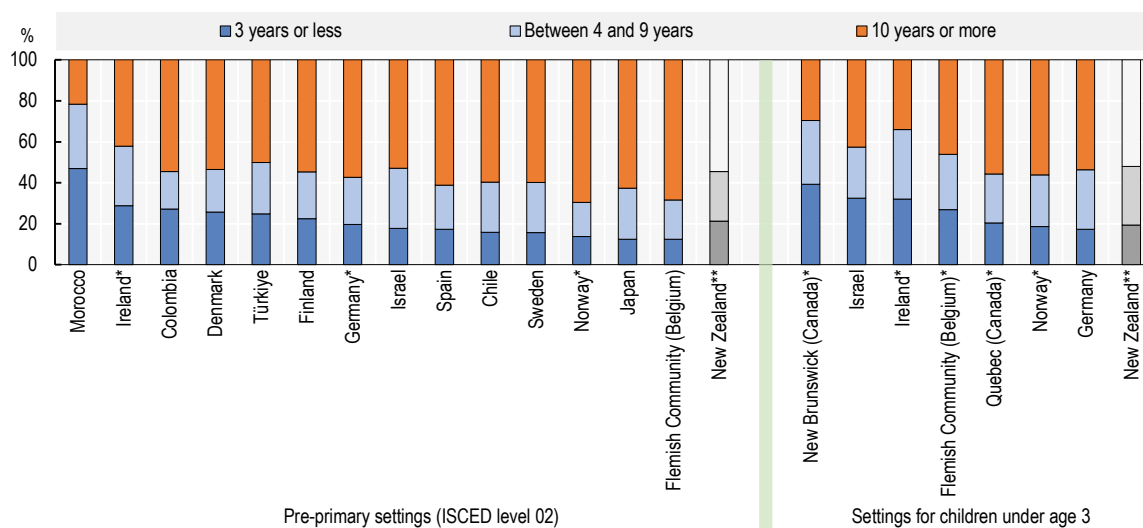
Experience varies considerably among staff: the least experienced 25% of staff have less than 5 years of experience on average and the most experienced 25% have around 25 years of experience or more on average in most systems (Table Staff.8). Novice staff, with three years of experience or less, represent a sizeable share of staff, ranging from about 12% in pre-primary settings in the Flemish Community of Belgium and Japan to about 30% or more in settings for children under age 3 in Israel and New Brunswick (Canada), in pre-primary settings in Morocco, and in settings at both ECEC levels in Ireland (Figure 2.6). Novice staff can bring new ideas to the profession, help address staff shortages that are common internationally and support the expansion of the ECEC sector in places where this is a priority; however, they also have different professional needs than their more experienced peers (see Chapter 6).

Experience is closely associated with age, although this is more the case in some countries and subnational entities. For example, in Morocco (pre-primary settings), New Brunswick (Canada; settings for children under age 3) and Ireland (both levels of ECEC), staff tend to be younger than in other countries and subnational entities (see Figure 2.3), and the majority of staff also has less than ten years of experience (Figure 2.6). Together these results suggest that sectors in these countries and subnational entities may be attracting new, younger people to the profession, in line with the expansion in the ECEC sector. Similarly, in pre-primary settings in Türkiye, settings for children under age 3 in the Flemish Community of Belgium and settings at both ECEC levels in Germany, staff also tend to be younger (see Figure 2.3), but the majority of staff have 10 years of experience or more (Figure 2.6), suggesting these systems may be both attracting young staff to the sector and retaining staff with more years of experience.

Other countries and subnational entities have high shares of new staff to the profession at all ages, with differences in the demographic profiles. While 20% or more of 30-49-year-olds working as staff at the pre-primary level in Denmark and New Zealand** have 3 years of experience or less, settings for children under age 3 in the Flemish Community of Belgium and Ireland are attracting new staff aged 50 and older at higher rates: at least 10% of staff aged 50 and older have 3 years of experience or less (Table D.2.9). By the same criteria, pre-primary settings in Colombia, Ireland and Morocco and settings for children under age 3 in Israel are attracting 30-49-year-olds as well as staff aged 50 and older as novice staff (Table D.2.9). In all these countries and subnational entities, the proportion of staff under age 30 is about a quarter or more (see Figure 2.3), indicating that staff in these countries have high shares of young staff too. The combination of high shares of young staff and novice staff coming into the workforce at several stages of their lives and careers suggests that these countries and subnational entities might be attracting staff of all ages into the workforce – but it could also mean that staff are leaving their roles before gaining longer term experience, therefore novice staff represent higher proportions of the workforce.

Figure 2.6. Years of experience as early childhood education and care staff

Based on staff reports



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Countries and subnational entities, except New Zealand, are ranked in descending order according to the percentage of staff with three years of experience or less.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.2.10.

Staff with more experience are more likely to be teachers and have higher educational attainment in several countries and subnational entities

Average years of experience are similar across staff roles in most systems, except in pre-primary settings in Denmark, Finland, Germany, Ireland and Sweden, where teachers are more experienced than assistants (Table D.2.10). This difference might sometimes be linked to educational attainment: in pre-primary settings in Denmark, Finland and Germany, staff whose highest educational attainment is a bachelor's degree or equivalent or higher (ISCED level 6 or above) also tend to have more years of experience (Table D.2.11). Since teachers also have higher educational attainment than other staff in these three countries (Table D.2.6), this might reflect that higher educational attainment leads to more specialisation that increases their attachment to the sector, compared to potentially more transitory employment for staff with lower and more general qualifications. In some cases, it could also signal that staff with lower educational attainment are being recruited more than in the past to address staff shortages, and that staff with longer tenure in the sector and higher qualifications occupy teacher roles.

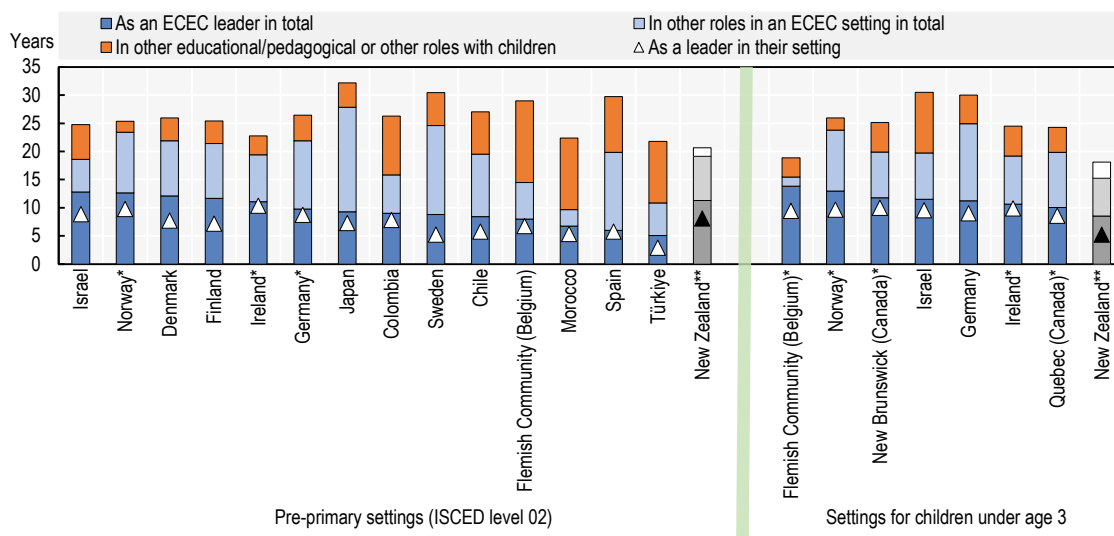
In some other countries and subnational entities that do not have a mix of staff roles (i.e. teachers and assistants), experience is also correlated with educational attainment. This is the case, for example, in pre-primary settings in the Flemish Community of Belgium and Türkiye and settings at both levels of ECEC in Israel, where staff with more than ten years of experience tend to have a bachelor's degree or equivalent or higher qualification (Table D.2.11). Interestingly, staff in pre-primary settings in Morocco with more than ten years of experience tend to have secondary education as their highest level of education more often than both short-cycle tertiary or vocational education (ISCED levels 4 and 5) and a bachelor's degree or equivalent or higher (Table D.2.11). This might also reflect an increase in the educational level of younger generations and therefore of staff newer to the profession.

Leaders have significant previous experiences with children, with experience predominantly acquired in ECEC settings in some systems and outside ECEC settings in others

Leaders have 5-14 years of experience as leaders on average across systems (Table Leader.5; Figure 2.7), reflecting the fact that experience is a requirement for becoming a leader in many ECEC systems (OECD, 2021^[21]). Leader experience at their ECEC setting is closely related to experience as an ECEC setting leader in total, which suggests that a sizeable share of leaders tend to stay at the setting where they began their role as a leader, with variations between countries and subnational entities. Additionally, they tend to have significant experience in other ECEC or educational roles before coming into their leadership position. However, leaders' previous experience is acquired differently across systems (Table D.2.12; Figure 2.7). In some systems, leaders acquire this experience mostly in ECEC settings, before progressing to leadership positions, suggesting greater involvement in the sector from earlier in their careers. This is the case in pre-primary settings in Chile, Denmark, Finland, Japan, Spain and Sweden; in settings for children under age 3 in the two Canadian provinces; and at both levels of ECEC in Germany, Ireland, New Zealand** and Norway. In other systems, leaders' experience comes predominantly from other educational/pedagogical roles with children outside of ECEC settings, suggesting more interconnections between sectors: this is the case in pre-primary settings in Colombia, the Flemish Community of Belgium, Morocco and Türkiye. Nonetheless, even when one kind of experience is dominant, in most systems, leaders have a mix of experience from within and outside the ECEC sector, signalling a diversity of pathways to leadership roles in ECEC systems. This diversity can be positive for recruiting strong candidates to the ECEC leader role but may also contribute to challenges for ECEC staff in identifying clear career pathways to stay in the sector (see Chapter 8).

Figure 2.7. Leaders' years of experience in early childhood education and care

Based on leader reports



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Countries and subnational entities, except New Zealand are ranked in descending order according to years of experience as an ECEC leader in total.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table Leader.5.

StatLink  <https://stat.link/bh2y35>

Employment conditions of early childhood education and care staff

The employment conditions of ECEC staff, such as remuneration and career structure, are key for attracting and retaining staff – one of the major challenges faced by the ECEC sector (Nutbrown, 2021^[3]) (see also Chapter 8). The diversity of ECEC systems and complexity of staff roles within these systems contribute to a wide range of working conditions. For example, assistants tend to have less clear competence profiles and professional recognition, as well as lower qualification requirements, which can lead to poorer job quality for some ECEC staff (Peeters, Sharmahd and Budginaité, 2018^[6]). On the other hand, staff with lower levels of education tend to be more satisfied with their working conditions (see Chapter 8) (OECD, 2019^[4]). As ECEC staff's employment conditions can have meaningful associations with programme quality (Banghart et al., 2020^[19]), it is crucial to understand them from the perspective of supporting children's experiences in ECEC and of retaining staff in the sector.

TALIS Starting Strong 2024 asks staff about their contractual status, in terms of whether they have permanent or fixed-term contracts or are self-employed or working without a contract. Staff also report whether they work as full time or part time, and among staff working part time, whether this was the type of work the respondent was seeking or if it was all that was offered. Both staff and leaders also reported on the number of settings in which they work. This section presents a summary of these various aspects of ECEC staff's employment conditions. Staff working hours are described further in Chapter 4 and the implications of employment conditions in relation to staff retention are considered in Chapter 8.

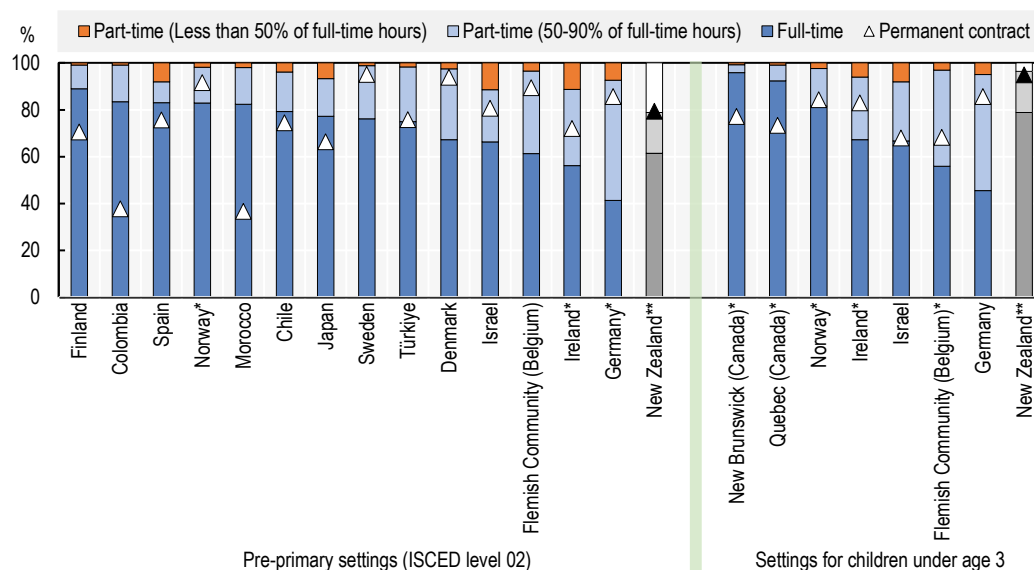
Most staff have permanent employment, but assistants are more likely to have a fixed-term contract than teachers in some systems

Around 70% or more of staff have permanent contracts across most systems, with most remaining staff in fixed-term contracts, and fewer in self-employment or without a contract (Figure 2.8; Table D.2.13). However, some systems make greater use of fixed-term contracts, such as pre-primary settings in Colombia and Morocco. In pre-primary settings in Denmark, Finland, Germany, Norway and Sweden, as well as settings for children under age 3 in Germany and Ireland, teachers tend to have permanent contracts more often than assistants, despite the central role assistants have in the staffing structures of these systems (Tables D.2.13). This could be related to years of experience in the sector: in pre-primary settings in Denmark, Finland, Germany and Sweden, higher shares of teachers than assistants have ten years of experience or more (Table D.2.10).

A few systems also have relatively high proportions of self-employed staff, such as pre-primary settings in Colombia, Ireland and Morocco, and staff for children under age 3 in the Flemish Community of Belgium, Israel, New Brunswick (Canada) and Quebec (Canada) (Table D.2.13). Although the share of staff without any employment contract tends to be very low across systems, this is not the case in settings for children under age 3 in the Flemish Community of Belgium, Israel, New Brunswick (Canada) and Quebec (Canada) and pre-primary settings in Morocco, Israel and New Zealand**, where more than 5% of staff do not have an employment contract (Table D.2.13). Among settings for children under age 3, high shares of staff in self-employment and with no contract are explained by the prevalent role of home-based ECEC providers in those four systems. In New Zealand** (both levels of ECEC), these differences also reflect the important role of parent volunteers in some types of ECEC, who do not have employment contracts.

Figure 2.8. Staff working hours and contractual status in early childhood education and care

Percentage of staff by working hour arrangements and with a permanent contract, based on staff reports



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Countries and subnational entities, except New Zealand, are ranked in descending order according to the percentage of staff in full-time work. Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.2.13 and Staff.6.

Part-time work is prevalent and chosen by staff in several systems

Settings in both levels of ECEC in the Flemish Community of Belgium, Germany, Ireland and Israel – as well as pre-primary settings in Denmark and New Zealand** – have about a third of staff or more who work part time (see Figure 2.8). In these systems, staff who work part time tend to report that this is the case because they were looking for part-time work (e.g. for health reasons, family commitments or to further their education) (Table D.2.14). In contrast, in pre-primary settings in Chile, Morocco, Spain and Türkiye, where 20% or more of staff work part time, more than half of these staff say they were only offered a part-time arrangement in the settings where they work (e.g. only part-time hours were available or due to limited opening hours of the ECEC setting; Table Staff.7). Part-time work can enable staff to balance their jobs with other responsibilities or personal priorities; however, it can also create undesired underemployment and limit opportunities for staff to stay in their roles or in the sector when this is the case. This may be particularly the case when the operating hours of ECEC settings do not align with the working hours desired by staff, such as for programmes that serve children for only part of the day.

Terms of the employment contract that can lead to lower job security tend to accumulate for some ECEC staff

In pre-primary settings in Chile, Denmark, Finland, Japan, Morocco, New Zealand** and Spain; in settings for children under age 3 in Norway and Quebec (Canada); and in settings at both ECEC levels in Ireland and Israel, staff who work full time also have permanent employment at higher rates than those who work part time (Table D.2.15). Staff who work part time tend to more often have fixed-term arrangements, and in pre-primary settings in Israel, settings for children under age 3 in Quebec (Canada) and both levels of ECEC in Ireland, staff who work part time more often do not have an employment contract than staff who work full time, reflecting an accumulation of more unstable job conditions. In most of these countries and subnational entities, about 20% or more staff work part time (see Figure 2.8).

However, staff may prefer to work on a part-time basis. Among staff who work part time because they were only looking for part-time work (voluntary part-time employment), permanent employment is more common than among staff who work part time because they were only offered part-time work (involuntary part-time employment), who tend to have fixed-term contracts more often. This is the case in pre-primary settings in Finland, the Flemish Community of Belgium, Ireland and Spain. In these countries and subnational entities, voluntary part-time work generally does not accumulate with fixed-term contracts. However, in Chile and Morocco (pre-primary settings), where involuntary part-time work is the most common form of part-time work, staff in voluntary and involuntary part-time work are both more likely to have a fixed-term contract.

Most staff work in a single ECEC setting whereas leaders in several countries work in multiple settings

With the exception of pre-primary settings in Israel, across all countries and subnational entities, fewer than 10% of staff work in more than one setting (Table D.2.16). In the case of staff in pre-primary settings in Israel, nearly 19% of staff report working in more than one ECEC setting. This work across settings is concentrated among teachers and staff for individual children. These teachers and staff for individual children can offer more targeted or widespread support to leaders who, in the pre-primary system in Israel, also have staff duties. Although working across settings is much less common for ECEC staff in other countries and subnational entities, there is a general trend of staff in supporting roles (e.g. staff for individual children, staff for special tasks) working in multiple settings.

Leaders tend to work in multiple settings more often than staff. The share of leaders who do so ranges from around 1% at the pre-primary level in Chile to more than 60% at the pre-primary level in Finland and Sweden, as well as in settings for children under age 3 in the Flemish Community of Belgium (Table D.2.17). The number of settings also varies with the system: leaders who work across multiple pre-

primary settings in Finland and Sweden work in less than three settings on average. In contrast, leaders who work across multiple settings for children under age 3 in the Flemish Community of Belgium report working in more than ten settings. This is an important feature of home-based provision for this sector in the Flemish Community of Belgium, with leaders working across a network of providers to support them, particularly with administrative and financial responsibilities. At the pre-primary level in Colombia and Morocco, more moderate shares (a quarter to a third) of leaders work across multiple settings, but the number of settings in which they report working is quite high. In addition to working at multiple ECEC settings, leaders can also have major responsibilities outside the ECEC setting; for example, leaders in Türkiye often have responsibility for other levels of schooling (i.e. primary and secondary schools) along with ECEC. In these contexts, they may have limited direct contact with the ECEC staff and children, with some leaders reporting they do not work any hours in the ECEC setting in a typical week (Table Leader.6).

Reflecting the fact that leaders can work in multiple ECEC settings, leaders' average paid working hours at the ECEC setting where they received the survey, for those who usually work at least one hour per week with the ECEC setting, vary from around 20 in pre-primary settings in Colombia and settings for children under age 3 in the Flemish Community of Belgium to more than 40 in pre-primary settings in Chile, and in settings for children under age 3 in Israel, New Brunswick (Canada) and Quebec (Canada) (Table D.2.18). This wide range reflects the tendency to work in multiple ECEC settings and responsibilities beyond the ECEC setting in particular contexts.

Leaders' unpaid working hours are generally low, but leaders of pre-primary settings in the Flemish Community of Belgium and Spain and of settings for children under age 3 in New Brunswick (Canada) and Quebec (Canada), report working eight unpaid hours or more, on average, per week. In both Canadian provinces, the high number of unpaid working hours contributes to working over 50 hours a week on average; long working hours are typical among home-based providers (OECD, 2020^[22]).

Policy pointers

- **Align qualification requirements with options to develop further qualifications, allowing for diverse professional pathways for all categories of staff.** In many countries and subnational entities, staff with more experience in the sector tend to be teachers, which overlaps with higher educational attainment and reflects that staff who have invested more in training for the profession are more likely to stay, but also that career progression options for less educated staff might be less developed. Having pathways for all categories of staff to pursue further qualifications and evolve in their careers within the sector can help fulfil different roles and retain staff longer in the sector (see Chapter 8). In systems with both assistants and teachers, differences in the educational attainment of these two categories of staff indicate that a transition from an assistant to a teacher role might require achieving a higher level of education, which can be supported through professional development opportunities (see Chapter 6) and systems that formally recognise skills and qualifications acquired on the job.

For staff with a higher educational attainment, opening pathways to transition into more specialised roles or into leadership can help not only fulfil these roles, but also improve the retention of experienced staff in the sector. Supporting staff to contribute to leadership responsibilities as part of their staff role can be a meaningful option for career development, while also offering job-embedded professional development that facilitates transitions towards leadership positions (see Chapter 7). Likewise, in systems with specific training requirements to become a leader, skills development opportunities can be integrated with ongoing work in the field to retain staff in their roles in the short term and support longer term careers in the sector.

- **Ensure that the terms of the employment contract align with goals to retain staff in the sector.** Job security and satisfaction with the terms of employment can contribute to attracting and

retaining staff in the sector (see Chapter 8). However, staff turnover rates are high in some countries and subnational entities (see Chapter 3). Having a fixed-term contract and working part time, especially when working part time is not preferred, can lead to feelings of job insecurity and dissatisfaction. These characteristics tend to accumulate for some staff, particularly assistants, in some countries and subnational entities. As staff shortages are a major concern in the sector, governments might consider directions to improve the terms of ECEC contracts. Likewise, staff who work in several settings, who tend to be mostly staff in specialised roles, also need employment conditions that adapt to their job demands while guaranteeing attractive employment conditions, and helping to address staff absences (see Chapters 3 and 8). On the other hand, leaders tend to have additional responsibilities, such as responsibility over multiple settings or pedagogical duties. Supporting leaders in these responsibilities can also help increase their commitment to remain in the sector and the overall quality of ECEC (see Chapter 7).

References

- Banghart, P. et al. (2020), *A Review of the Literature on Access to High-Quality Care for Infants and Toddlers*, Child Trends, https://cms.childtrends.org/wp-content/uploads/2020/05/HighQualityCareLitReview_ChildTrends_May2020.pdf. [19]
- Beisly, A. and V. Lake (2021), “Knowledge of child development: Associations among pre-service teachers’ level of education and work experience”, *Journal of Early Childhood Research*, Vol. 19/2, pp. 195-210, <https://doi.org/10.1177/1476718X20942948>. [11]
- BMBFSFJ (2025), *Early Opportunities Online Portal*, <https://www.fruehe-chancen.de/en>. [8]
- Drake, T. et al. (2023), “What shapes principals’ early education leadership practices? A mixed-methods study of North Carolina school leaders”, *Leadership and Policy in Schools*, pp. 1-22, <https://doi.org/10.1080/15700763.2023.2277270>. [16]
- Eadie, P. et al. (2024), “Domains of quality in early childhood education and care: A scoping review of the extent and consistency of the literature”, *Educational Review*, Vol. 76/4, pp. 1057-1086, <https://doi.org/10.1080/00131911.2022.2077704>. [1]
- Eurydice Unit (2025), “Denmark: 8.1. Initial education for teachers working in early childhood and school education”, Danish Ministry of Higher Education and Science, Copenhagen, <https://eurydice.eacea.ec.europa.eu/eurygedia/denmark/initial-education-teachers-working-early-childhood-and-school-education>. [9]
- Fukkink, R. et al. (2019), “Training interaction skills of pre-service ECEC teachers: Moving from in-service to pre-service professional development”, *Early Childhood Education Journal*, Vol. 47/4, pp. 497-507, <https://doi.org/10.1007/s10643-019-00928-6>. [12]
- Geißler, C. et al. (2022), “The influence of formal education, years of service and team meetings on the quality of interaction in Austrian centre-based settings for children under 3 years”, *Journal of Early Childhood Education Research*, Vol. 11/1, pp. 68-96, <https://journal.fi/jecer/article/view/114008>. [13]
- Harris, D. and T. Sass (2011), “Teacher training, teacher quality and student achievement”, *Journal of Public Economics*, Vol. 95/7-8, pp. 798-812, <https://www.sciencedirect.com/science/article/pii/S0047272710001696?via%3Dihub>. [18]

- Koch, A. and J. Jensen (2024), “Denmark – ECEC workforce profile”, in Oberhuemer, P. and I. Schreyer (eds.), *Early Childhood Workforce Profiles across Europe: 33 Country Reports with Key Contextual Data*, State Institute for Early Childhood Research and Media Literacy, Munich, <https://www.ucviden.dk/en/publications/denmark-ecec-workforce-profile>. [10]
- Leseman, P. and P. Slot (2025), “Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses”, *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [2]
- Lin, Y. and K. Magnuson (2018), “Classroom quality and children’s academic skills in child care centers: Understanding the role of teacher qualifications”, *Early Childhood Research Quarterly*, Vol. 42, pp. 215-227, <https://www.sciencedirect.com/science/article/pii/S0885200617302491?via%3Dihub>. [15]
- Manning, M. et al. (2019), “Is teacher qualification associated with the quality of the early childhood education and care environment? A meta-analytic review”, *Review of Educational Research*, Vol. 89/3, pp. 370-415, <https://doi.org/10.3102/0034654319837540>. [14]
- McDonald, P., L. Coles and K. Thorpe (2024), “How women educators frame the scarcity of men in early childhood education and care”, *Gender and Education*, Vol. 36/5, pp. 510-526, <https://doi.org/10.1080/09540253.2024.2357825>. [5]
- McMullen, E. et al. (2020), “Is educators’ years of experience in early childhood education and care settings associated with child outcomes? A systematic review and meta-analysis”, *Early Childhood Research Quarterly*, Vol. 53, pp. 171-184, <https://doi.org/10.1016/j.ecresq.2020.03.004>. [17]
- Nutbrown, C. (2021), “Early childhood educators’ qualifications: A framework for change”, *International Journal of Early Years Education*, Vol. 29/3, pp. 236-249, <https://doi.org/10.1080/09669760.2021.1892601>. [3]
- OECD (2021), *Starting Strong VI: Supporting Meaningful Interactions in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/f47a06ae-en>. [21]
- OECD (2020), *Quality Early Childhood Education and Care for Children Under Age 3: Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/99f8bc95-en>. [22]
- OECD (2019), *Providing Quality Early Childhood Education and Care: Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/301005d1-en>. [4]
- Peeters, J., N. Sharmahd and I. Budginaité (2018), “Early childhood education and care (ECEC) assistants in Europe: Pathways towards continuous professional development (CPD) and qualification”, *European Journal of Education*, Vol. 53/1, pp. 46-57, <https://doi.org/10.1111/ejed.12254>. [6]
- Perlman, M. et al. (2020), “Associations between directors’ characteristics, supervision practices and quality of early childhood education and care classrooms”, *Early Education and Development*, Vol. 31/4, pp. 507-523, <https://doi.org/10.1080/10409289.2019.1679006>. [20]

Wilkinson, J., J. Davies and J. Warin (2024), “Men changing nappies: Dismantling a key barrier to gender-diversifying the early years workforce”, *Journal of Early Childhood Research*, Vol. 22/2, pp. 224-237, <https://doi.org/10.1177/1476718X231201725>. [7]

3

Structural features of high-quality early childhood and education care

This chapter presents findings from the 2024 Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) on the characteristics of early childhood education and care (ECEC) settings. It describes management and funding arrangements, the geographical location of settings and their surrounding neighbourhoods, organisational structures and setting size. The chapter also outlines operational challenges, including the presence of vulnerable children; waiting lists; and workforce aspects, such as short- and long-term staff absences. Finally, it examines how these structural features are linked to the type of management of ECEC settings, distinguishing between public and private provision.

Key findings

- **Most ECEC systems combine public and private ECEC provision.** In countries and subnational entities providing ECEC for children under age 3, a majority of settings are privately managed, and in some, large percentages of settings are private for-profit. Pre-primary settings also have a mix of public and private provision, with a greater reliance on public settings compared to the sector serving children under age 3.
- **To some extent, funding sources align with management types,** with direct payments by governments being more common in publicly managed settings and fees paid by parents being more common in privately managed ones. However, in several ECEC systems, both public and private, including ones for-profit, settings receive funding from the government. This reflects countries' approaches that build on private provision to expand enrolment in ECEC.
- **Public ECEC provision is more common than private provision in rural areas and small towns, as well as in lower quality neighbourhoods.** The geographical distribution of ECEC settings and features of the quality of the neighbourhood reflect overall structural differences across countries and subnational entities.
- **Physical indoor and outdoor spaces seem generally adequate but background noise level, limited ventilation and a lack of shaded outdoor areas are a concern in some countries and subnational entities. The adequacy of physical spaces is better in privately managed settings.** Co-location with a primary school is more common for pre-primary settings than those serving children under age 3 and in systems where pre-primary education is under the Ministry of Education. Publicly managed settings are more often co-located with primary schools.
- **In most ECEC systems, vulnerable children are concentrated in relatively small percentages of ECEC settings. Public ECEC settings are more likely than private ones to serve large shares of vulnerable children.**
- **Some systems combine public and private ECEC provision in ways that may not exacerbate inequalities between children.** Although there are disparities in many countries and subnational entities, there are no apparent differences in the geographical distribution and structural features of quality between publicly and privately managed settings in the Flemish Community of Belgium (both levels of ECEC), pre-primary in Norway, and settings for children under age 3 in Germany and Quebec (Canada). In addition, in the Flemish Community of Belgium and Germany (both levels of ECEC), no differences are found in the shares of vulnerable children in public and private ECEC settings.
- **The size of ECEC settings in terms of child enrolment varies widely but tends to be smaller for settings that serve children under age 3.** Most ECEC systems typically have two or three staff members for every ten children in a setting, but these numbers vary across systems.
- **The number of staff per child tends to become less favourable as the size of the centre increases,** indicating that having more children (regardless of whether they attend full time or part time) is not proportionally matched with a greater number of staff (regardless of their role and full-time or part-time work).
- **Average percentages of new staff and absent staff in ECEC settings are high in several countries and subnational entities. In approximately half of the countries and subnational entities, unmet demand within settings is a significant challenge,** especially in settings for children under age 3.

Structural characteristics of ECEC settings set the conditions for rich interactions between ECEC staff and children, which is what matters the most for children's development. These characteristics are diverse, ranging from the location of ECEC settings to the quality of physical spaces and the number of staff and children enrolled. While often less proximal to children than staff practices with children, many of these structural features of quality can be changed by policies. At the same time, budget constraints, difficulties in attracting and retaining staff, and a growing variety of children's needs driven by increased diversity of populations all pose challenges for prioritising policies to strengthen ECEC systems.

The Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) covers different types of ECEC settings (Box 3.1). The data from the survey characterise ECEC settings along multiple dimensions and highlight variations across and within participating countries and subnational entities. This chapter presents and discusses variation in several structural features of ECEC settings that are known to support the quality of staff interactions with children, or process quality, as well as families' access to ECEC (Figure 3.1). Findings from this chapter also help contextualise analyses presented in subsequent chapters of this report. This chapter addresses the following questions:

- Are ECEC systems characterised by settings that are mainly publicly managed, privately managed or is there a mix of both types of provision? What types of funding sources do settings receive?
- To what extent are ECEC settings concentrated in rural or urban areas and how do leaders perceive the quality of the neighbourhoods around their ECEC settings? What is the quality of the physical space in ECEC settings like?
- What is the size and organisation of ECEC settings in terms of the number of children and staff? What are the demographic characteristics of children? How much turnover and absences do leaders report among their staff? Are there waiting lists for places in ECEC settings?
- Do these various structural features of quality vary depending on the type of setting management?

Box 3.1. Types of early childhood education and care setting covered by TALIS Starting Strong 2024

All officially registered (i.e. under the jurisdiction of an appropriate government authority or regulatory body) centre-based pre-primary programmes and all officially registered, centre- and home-based programmes serving children under age 3 in each participating country and subnational entity were considered in-scope for the TALIS Starting Strong 2024 sample. However, some countries and subnational entities did not collect data on home-based settings for children under age 3 [see OECD (forthcoming^[1])]. Home-based settings were not part of the population targeted by the survey at the pre-primary level (ISCED 02), reflecting the important role of home-based early childhood education and care (ECEC) for the segment of the sector serving children under age 3, although in many countries and subnational entities, older children may also attend home-based ECEC settings.

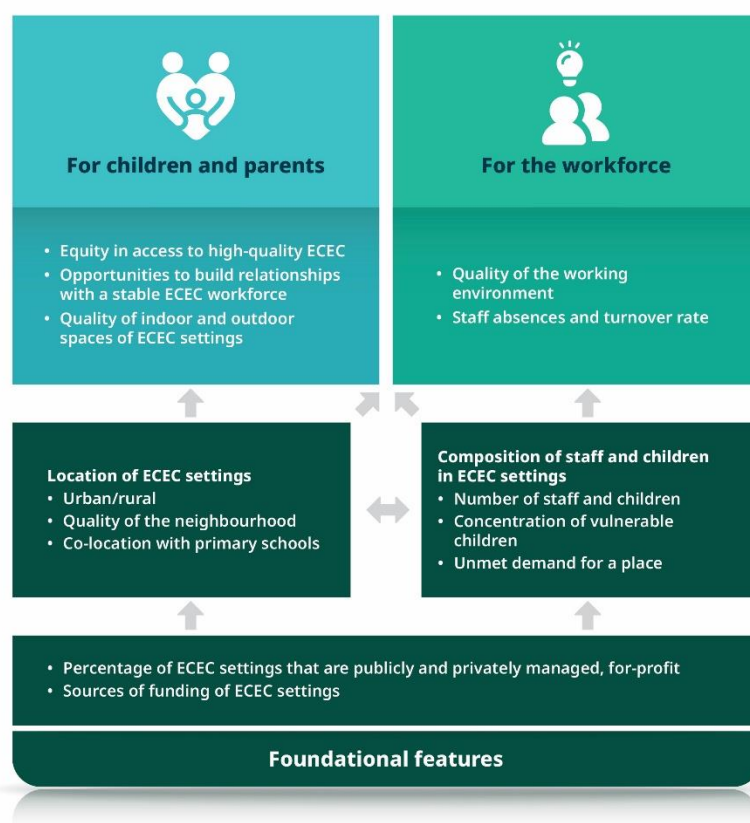
Home-based settings typically involve a single staff member providing care in their own home to a small group of children, although there is wide variation in how this type of ECEC is organised, regulated and delivered to families. Centre-based settings refer to organised ECEC delivered in facilities designed for group-based care, such as early learning centres, crèches, kindergartens, preschools or schools.

Home-based settings represent a significant proportion of the ECEC settings for children under age 3 in the TALIS Starting Strong 2024 data among the countries and subnational entities that collected data in this type of ECEC setting (Table D.3.1). In the Flemish Community of Belgium, Israel and Quebec (Canada), over 50% of settings for children under age 3 in TALIS Starting Strong 2024 are home-based, although there are differences in how these settings are reflected in the data. For example, in the case

of the Flemish Community of Belgium, leaders outside of the settings often oversee a network of home-based ECEC. In contrast, in Quebec (Canada), home-based staff tend to work more independently. Data from home-based settings are also available for New Brunswick (Canada) and New Zealand**.

Although data for pre-primary settings in TALIS Starting Strong 2024 are all officially regulated as centre-based settings, some pre-primary leaders report that their ECEC settings are located in their own or in another home (Table Leader.15). This is especially prevalent in Colombia, Ireland and Morocco. In Colombia, for instance, 33% of pre-primary leaders report their ECEC setting is in a home. These settings are nonetheless considered equivalent to centres in the Colombian context, even when staff work largely independently. In contrast, in the Flemish Community of Belgium and Spain, more than 75% of pre-primary settings are co-located with primary schools, whereas in pre-primary settings in Denmark, Germany and Japan and both levels of ECEC in New Zealand** and Norway, ECEC settings are most often located in stand-alone buildings, reflecting various regulations or public support across countries and subnational entities.

Figure 3.1. Analytical framework for analysing structural features of high-quality early childhood and education care



Managing and funding early childhood education and care settings

Compared to other levels of education, the ECEC sector is known to have both a higher share of private provision and of private funding, particularly among services for the youngest children (OECD, 2025^[2]). These characteristics shape the sector's capacity to provide high-quality education and care to all children: inadequate public funding may limit the enrolment of children who have the most to gain from participating in ECEC while the combination of privately and publicly managed settings can contribute to variation in the quality of ECEC provision. The balance of public, private non-profit and for-profit providers as well as the share of public funding reflect policy choices; well-managed and regulated mixed systems in some countries demonstrate that diverse providers can create effective and fair ECEC offerings (Leseman and Slot, 2025^[3]).

TALIS Starting Strong 2024 provides information on the type of management and profit status of ECEC settings (Box 3.2). It also includes information on the types of funding sources, including government payments, fees or charges paid by families, and payments by parents' employers, received by ECEC settings.

Box 3.2. Definitions of early childhood education and care settings' type of management and profit status

TALIS Starting Strong 2024 describes early childhood education and care (ECEC) settings' type of management, profit status and chain/franchise/network status as follows:

- **Publicly managed:** ECEC settings that are managed by a public education authority, government agency or municipality.
- **Privately managed:** ECEC settings that are managed by a non-governmental organisation, e.g. a church/synagogue/mosque, trade union, business, other private institution or person.
- **For-profit:** ECEC setting aims to make more money than its costs (a profit).
- **Non-profit:** ECEC setting does not aim to make a profit, or all profits are reinvested into the ECEC setting.
- **Chain:** An ECEC setting that is part of a chain/franchise/network is one that is centrally managed by a single, non-governmental organisation that manages multiple ECEC settings. This can be a chain, franchise or network. It may receive public funding.

Information on ECEC settings' type of management and profit status is collected from leaders' responses and can therefore differ from administrative data. In Ireland and New Zealand at both levels of ECEC, all ECEC settings are officially privately managed.

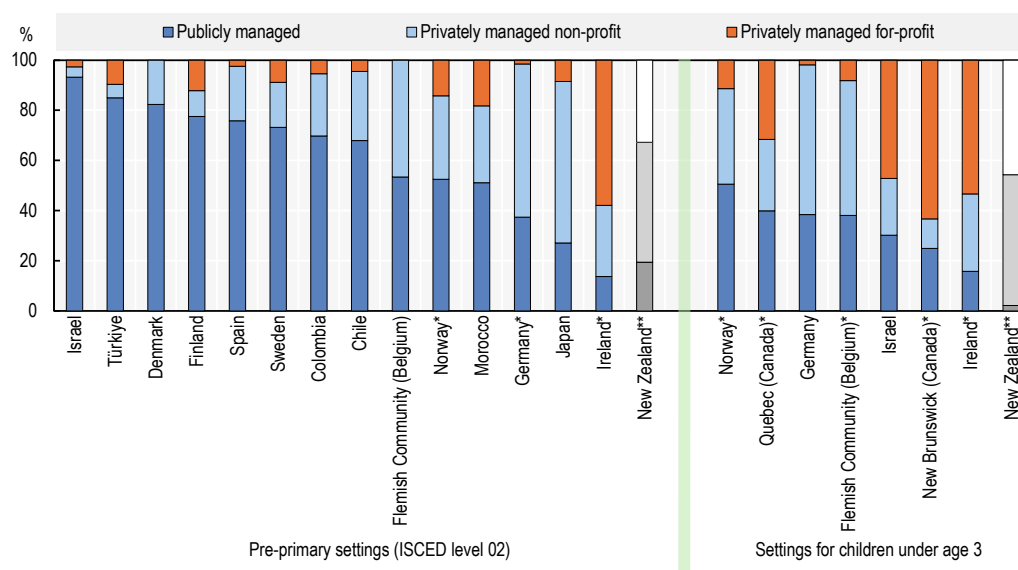
Most ECEC systems combine public and private provision, with private non-profit and for-profit provision being more prevalent for children under age 3

At least 60% of pre-primary settings are publicly managed in Chile, Colombia, Denmark, Finland, Israel, Spain, Sweden and Türkiye and privately managed in Germany, Ireland, Japan and New Zealand** (Figure 3.2). The Flemish Community of Belgium, Morocco and Norway have a more balanced mix of public and private pre-primary settings. Privately managed provision for children under age 3 is more prevalent in most participating countries and subnational entities, with more than half of settings being privately managed in all cases (Table D.3.2). In Germany, Ireland and Norway, the mix of types of settings for the under age 3 sector is similar to that of the pre-primary level, reflecting the integration of the overall ECEC system (see Annex A).

Among privately managed pre-primary settings, most operate on a non-profit basis except in Ireland, where for-profit privately managed settings dominate (Figure 3.2). The prevalence of for-profit private settings is more pronounced in ECEC for children under age 3. In Ireland, Israel, New Brunswick (Canada) and New Zealand**, more than 40% of settings are privately managed for-profit.

Figure 3.2. Early childhood education and care settings' type of management and profit status

Percentage of publicly and privately managed, for-profit and non-profit ECEC settings, according to leaders



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: ECEC settings in Ireland and New Zealand are technically all privately managed, therefore the results should be interpreted with caution. ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the percentage of publicly managed ECEC settings. Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.3.3.

StatLink  <https://stat.link/z71n8e>

Pre-primary settings are generally part of a chain, franchise or network in the Flemish Community of Belgium and to some extent in Chile, Colombia, Japan and Morocco while the prevalence of these types of settings is below 30% in the other countries and subnational entities (Table D.3.2). Concerning the under age 3 sector, settings that are part of a chain, franchise or network are common in the Flemish Community of Belgium and Israel, and to some extent in Germany, New Zealand**, Norway and Quebec (Canada).

Most ECEC settings, whether they are publicly or privately managed, receive a combination of sources of funding

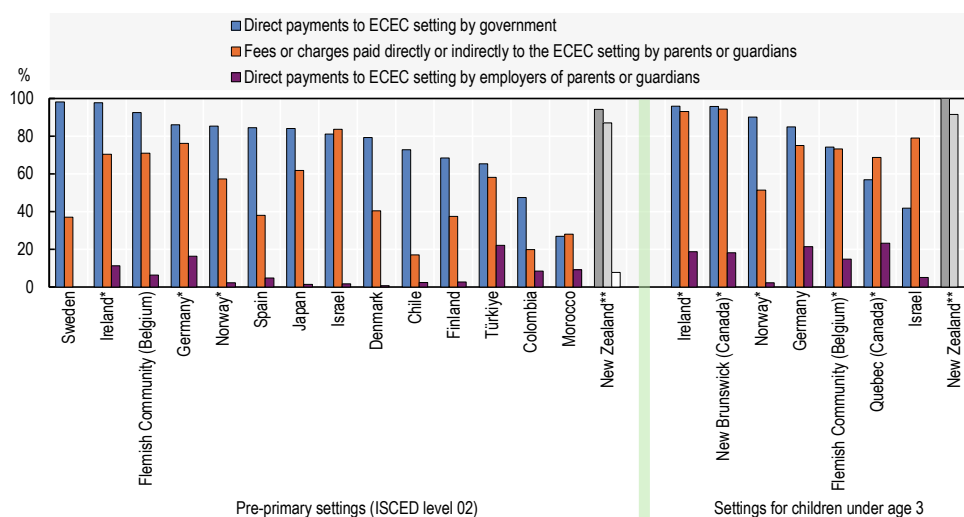
TALIS Starting Strong 2024 sheds light on the variety of funding sources received by ECEC settings, but additional system-level data are necessary to grasp the size of the contribution of each type of funding to ECEC total funding (see Annex A). In 2022, on average, across OECD countries, the share of private expenditure in total ECEC expenditure amounted to 14% for pre-primary education and 22% for early childhood educational development (the part of ECEC for children under age 3 meeting criteria to be included in the International Standard Classification of Education), with many missing data for this level of

ECEC (OECD, 2025^[4]). Among countries and subnational entities participating in TALIS Starting Strong 2024, the share of private funding was above the OECD average in Chile, Denmark, Japan and Türkiye for pre-primary education, and in Israel for early childhood educational development (OECD, 2025^[2]). No data were available for Canada, Colombia, Morocco or New Zealand**, and the share of private funding was below the OECD average in the remaining participating countries and subnational entities.

Aligned with these system-level data, in all countries and subnational entities, a majority of settings receive direct payments from the government except in Colombia and Morocco for pre-primary and in Israel for settings for children under age 3 (Figure 3.3). A majority of pre-primary settings receive fees or charges paid directly or indirectly by parents or guardians in the Flemish Community of Belgium, Germany, Ireland, Israel, Japan, New Zealand**, Norway and Türkiye and in all countries and subnational entities in settings for children under age 3. These data reveal that it is common for ECEC settings to receive this type of private funding together with public funding, even though the share of private funding according to system-level data is low in some of the participating countries and subnational entities (see Annex A). The combination of various sources of funding is particularly frequent in settings for children under age 3.

Figure 3.3. Early childhood education and care settings' sources of funding

Percentage of ECEC settings whose leaders report that their setting received funding from the following sources in the 12 months prior to the survey



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Direct payments to ECEC setting by government include entities at any level of government.

The figure only shows valid data. Values that are not shown are those based on too few observations to ensure reliability.

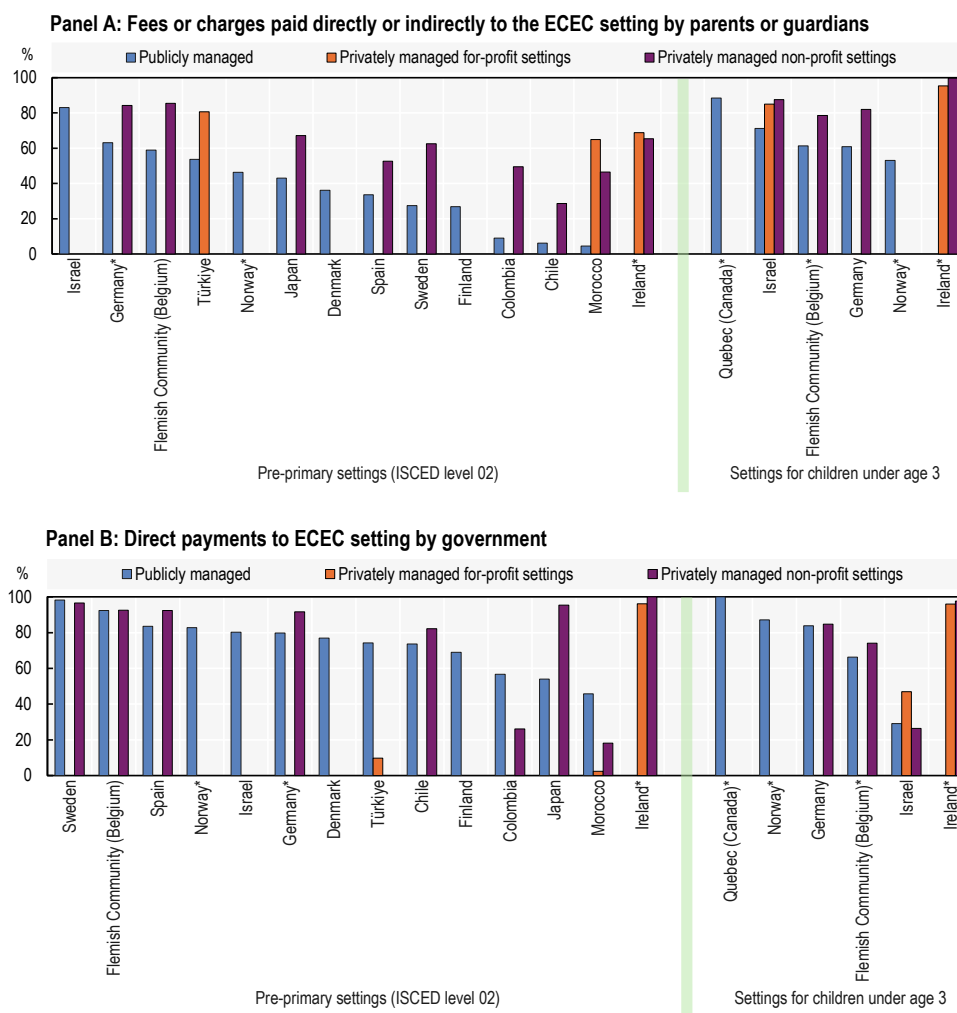
ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the percentage of direct payments to ECEC by government.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table Leader.18.

Figure 3.4. Private and public sources of funding to privately and publicly managed early childhood education and care settings

Percentage of publicly managed and privately managed, for-profit and non-profit settings whose leaders report that their setting received funding from the following sources in the 12 months prior to survey



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

Notes: New Zealand and Quebec (Canada) are excluded due to small sample sizes.

The figure only shows valid data. Values are not shown because the questions were not administered, or the data were excluded for technical reasons or were based on too few observations to ensure reliability.

ECEC: early childhood education and care.

Countries and subnational entities are ranked in descending order by the percentage of sources of funding for publicly managed settings.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.3.4.

StatLink  <https://stat.link/8bqa9t>

The role of employers in the financing of ECEC has developed in some countries, particularly for ECEC for children under age 3, as a way to support employees' return to work after the end of maternity leave (OECD, 2025^[2]). This is reflected in this second type of private funding being somewhat more common for settings for children under age 3 than for pre-primary education, although only a small share of settings receive this type of funding regardless of the level of ECEC. In most countries and subnational entities, less than 30% of pre-primary setting leaders report that their settings receive funding from other non-governmental sources (e.g. from religious institutions, fundraising or subsidies through non-profit ECEC providers; Table D.3.4). Exceptions include Germany at both levels of ECEC, where this applies to

a large majority of settings, and pre-primary settings in the Flemish Community of Belgium, where about half of settings receive this type of funding.

To some extent, funding sources align with management types and profit status with differences in how public and private provisions are financed (Figure 3.4). Fees or charges paid directly or indirectly by parents or guardians are more common in privately managed settings at both levels of ECEC. A similar pattern is observed for direct payments from parents' or guardians' employers. However, in several ECEC systems, publicly and privately managed settings are equally likely to receive funding from the government; while the share of public funding received by ECEC settings might vary by type of management, the survey does not capture this. In Ireland (both levels of ECEC) and settings for children under age 3 in New Brunswick (Canada) and Israel, almost half or more of for-profit private settings receive direct funding from the government. These findings highlight the importance for governments to design policies to support ECEC equity and quality that cover the entire system, including its privately managed part, considering the investments that are made across the system.

Describing early childhood education and care settings' geographical location and physical features

The geographical coverage of ECEC services defines their accessibility, but location is also a driver of quality. Urban areas generally offer more ECEC options with better infrastructure and more diverse programmes, though they may also face overcrowding and high costs (Hulpia et al., 2024^[5]). In comparison, rural communities often struggle with limited availability, longer travel distances and difficulties in staffing, contributing to lower participation rates and possibly lower quality (Lee, 2025^[6]). Socio-economic status further compounds these disparities, as low-income neighbourhoods – whether urban or rural – tend to lack high-quality ECEC provision (Baxter and Hand, 2013^[7]; OECD, 2025^[2]). The co-location of ECEC settings with primary schools is another dimension of ECEC settings' physical features that can be a strength for ECEC quality by facilitating collaboration of staff around curriculum and pedagogical methods as well as children's transitions to primary school (OECD, 2017^[8]; Pianta et al., 2005^[9]). However, when shared spaces contribute to a more academic focus in ECEC than would otherwise be the case, the advantages of co-location can be eroded. The physical characteristics of ECEC settings also shape the quality of the learning environment (Matthews and Lippman, 2020^[10]). For instance, the size and structure of indoor and outdoor environments have been found to relate to children's social and cognitive development (Kiviranta et al., 2024^[11]; van Liempd, Oudgenoeg-Paz and Leseman, 2020^[12]). Features of the physical space like air quality gained attention during the COVID-19 pandemic and are becoming increasingly relevant as ECEC settings adapt to shifting climates and to the environmental conditions needed to keep young children safe in extreme weather, particularly heat.

TALIS Starting Strong 2024 gathers information on the geographical location of ECEC settings and on leaders' perceptions of the quality of the neighbourhood environment around the setting. In addition, the survey asks leaders about key features of the ECEC setting's physical infrastructure to assess their quality. These various types of information are used to describe differences between and within countries and subnational entities and identify gaps in the accessibility and quality of ECEC settings.

The geographical distribution of ECEC settings and features of the quality of the neighbourhood reflect structural differences across countries and subnational entities

How ECEC settings are spread across rural and urban areas varies widely across participating countries and subnational entities, which reflects differences in the regional distribution of countries' populations more generally (Table Leader.13). In pre-primary settings in Colombia and Morocco, settings for children under age 3 in the Flemish Community of Belgium, and both levels of ECEC in Ireland and Norway, leaders

report that more than half of ECEC settings are in rural areas or small towns compared to larger towns or cities. A plurality of pre-primary settings in the Flemish Community of Belgium, Spain and Sweden; settings for children under age 3 in New Brunswick (Canada); and settings at both levels of ECEC in Germany are also in rural areas or small towns. In contrast, in pre-primary settings in Chile and Japan and both levels of ECEC in New Zealand**, more than half of settings are in cities. This is also true for a plurality of pre-primary settings in Türkiye. Pre-primary settings in Denmark and settings for children under age 3 in Israel are most often in moderately populated towns, rather rural areas or cities. Pre-primary settings in Finland and Israel and settings for children under age 3 in Quebec (Canada) are more evenly distributed across rural areas/small towns, towns and cities.

A safe environment where children can play and families can access a range of services is crucial for children's development and well-being. In all countries and subnational entities, a majority of settings at both levels of ECEC are in neighbourhoods with safe public spaces where children can play, according to their leaders, although this is less frequently the case for pre-primary settings in Chile, Morocco and Türkiye (Table D.3.5). At least 80% of ECEC setting leaders in a majority of systems report their settings are located close to family support services (e.g. health services, social services). These percentages are lower for pre-primary settings in Colombia, Morocco and Türkiye and in Ireland for both levels of ECEC.

Across countries and subnational entities, leaders have different perceptions of the extent to which ECEC centres are likely to be in unfavourable neighbourhoods (Table D.3.5). For instance, large percentages of pre-primary leaders in Chile and to some extent Colombia report drug-related issues, litter lying around, vandalism, or people from diverse backgrounds facing insults or attacks. Such neighbourhood issues are a widespread national concern in these countries (OECD, 2025^[13]). In contrast, small percentages of pre-primary leaders in Japan report these issues. In other countries and subnational entities, leaders in general report low levels of neighbourhood difficulties, yet some report specific problems such as drug-related issues in Ireland and Norway (both levels of ECEC); the Flemish Community of Belgium, New Zealand** and Sweden (pre-primary); and New Brunswick (Canada) (settings for children under age 3).

Public ECEC provision is more common than private provision in rural areas and small towns, and in some countries in lower quality neighbourhoods

In several countries and subnational entities with available data, publicly managed pre-primary settings are more often found in small towns or rural areas than privately managed settings (Table 3.1). This is the case for pre-primary settings in Germany, Morocco, Spain, Sweden and Türkiye, as well as for settings for children under age 3 in Israel.

Similarly, when various aspects of the characteristics of the neighbourhood around ECEC settings are combined to capture its overall quality as perceived by leaders, privately managed pre-primary ECEC settings are more likely to be in areas that leaders perceive to have higher quality neighbourhoods than their publicly managed counterparts in Chile, Morocco and Türkiye (Table 3.1).

While governments have often relied on private ECEC provision to expand the ECEC supply, these findings highlight that private provision is less likely to develop in rural areas, and to some extent in unfavourable

Table 3.1. Differences in geographical and physical characteristics of early childhood education and care settings between privately and publicly managed settings

Statistically significant differences in percentages of ECEC settings whose leaders report that their setting has the following characteristics between privately and publicly managed settings

	More common for private settings
	More common for public settings
	Difference is not significant
	Missing values

	Small town or rural areas	Co-located with primary school	Adequacy of physical space	Quality of neighbourhood environment
Pre-primary settings (ISCED level 02)				
Chile				
Colombia				
Denmark				
Finland				
Flemish Community (Belgium)				
Germany*				
Ireland*				
Israel				
Japan				
Morocco				
Norway*				
Spain				
Sweden				
Türkiye				
<i>New Zealand**</i>				
Settings for children under age 3				
Flemish Community (Belgium)*				
Germany				
Ireland*				
Israel				
New Brunswick (Canada)*				
Norway*				
Quebec (Canada)*				
<i>New Zealand**</i>				

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: As higher scores on the “quality of neighbourhood environment” scale indicate lower neighbourhood quality, differences (and the colour scheme) have been reversed in this table to facilitate visual comparison with the scale of “adequacy of physical space”. For more information about the scales, see Annex C.

“Primary school” refers to ISCED level 1 (ISCED 2011).

Missing values are due to having too few observations to ensure reliability or because all ECEC settings are officially privately managed (see Box 3.2).

ECEC: early childhood education and care.

For more information on statistically significant values, see Annex C.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.3.6.

StatLink  <https://stat.link/nsgql4>

neighbourhoods. This can be the consequence of a deliberate choice of governments to target public ECEC towards these areas, or signal inequalities in the supply of ECEC places, with the possibility for private ECEC provision to target more densely populated and favourable areas.

Indoor and outdoor spaces are generally adequate, but background noise level, limited ventilation and a lack of shaded outdoor areas can be concerns

Overall, in all countries and subnational entities, large majorities of ECEC setting leaders consider that the physical spaces and equipment, both indoor (e.g. amount of furniture, condition of ceilings, walls and floors) and outdoor (e.g. spaces where children can easily move) are adequate (Table D.3.7). This is, however, somewhat less the case for background noise levels in indoor spaces, with more than 40% of leaders disagreeing with “background noise level in the classroom/playgroup/group does not interfere with interactions” in pre-primary settings in Denmark, Finland and Norway and at both levels of ECEC in Germany. In addition, in pre-primary settings in Denmark and Finland, both levels of ECEC in the Flemish Community of Belgium and Germany, and in settings for children under age 3 in Norway, around a quarter or more of leaders disagree that ventilation is adequate for healthy airflow. Along the same lines, more than 30% of pre-primary leaders in Finland, Morocco and Türkiye report that outdoor spaces lack shaded areas. These findings point to challenges related to air quality and climate change implications, and to areas for attention to support children’s and ECEC staff’s well-being in ECEC settings.

Publicly managed settings are more often co-located with primary schools while the adequacy of physical spaces is stronger in privately managed settings

When features of the physical space captured in the survey (e.g. adequate ventilation, background noise level) are combined to give an overall picture of the adequacy of the physical space, in several countries and subnational entities with available data, privately managed settings have more adequate physical spaces than publicly managed ones. This holds in pre-primary settings in Colombia, Finland, Morocco, Spain and Türkiye, and in settings for children under age 3 in Israel and Norway (see Table 3.1). This may reflect the growth in the private sector in many places, with perhaps newer buildings or more recently renovated spaces available for private ECEC providers entering the sector.

Co-location with primary schools generally reflects how countries’ and subnational entities’ ECEC systems are designed and governed more broadly (see Annex A). Unsurprisingly, co-location with a primary school is more frequent for pre-primary settings than for settings for children under age 3 (Table Leader.15). Furthermore, in systems where pre-primary education is under the Ministry of Education and mostly governed together with primary education, co-location is more frequent. This is the case for pre-primary settings in the Flemish Community of Belgium, Morocco, Spain and Türkiye. In several countries and subnational entities, pre-primary publicly managed settings are more likely than privately managed ones to be co-located with primary schools (see Table 3.1). This is because primary schools in most of these countries and subnational entities are mostly public (OECD, 2025^[4]).

Understanding the size, staffing and organisation of activities of early childhood education and care settings

The size of ECEC settings in terms of the numbers of children attending and staff working directly with children affects children’s every day learning experiences and staff’s professional collaboration opportunities. The number of staff relative to the number of children at the ECEC setting level shapes the degree of flexibility for settings to organise the work (Bowne et al., 2017^[14]; OECD, 2025^[2]). Higher staff-to-child ratios enable caregivers to supervise more effectively, reduce the risk of accidents and experience lower stress levels (Perlman et al., 2017^[15]). They also facilitate individualised interactions, which are

essential for fostering secure emotional attachments and enhancing developmental outcomes (Howard et al., 2024^[16]).

Compared to higher levels of education, where children are mostly in fixed class groups, ECEC settings can use more flexible group organisation. Allowing children to move freely between groups or spaces has gained prominence as a way to support child-centred and play-oriented activities, as it also allows children to engage more freely with their environment and explore their interests (Collins, Jones and Tonge, 2022^[17]). However, smaller, stable groups can encourage calmer environments and more responsive interactions, depending on how these different approaches are implemented and the ages of the children involved (Dalgaard, Bondebjerg and Svinth, 2023^[18]; Dalgaard et al., 2022^[19]).

TALIS Starting Strong 2024 data provide information from leaders on the number of children enrolled and the number of ECEC staff working at ECEC settings. The survey also asks leaders how staff's work with children is organised at their setting, either in a "closed/core group" or in an "open group/free-flow environment". These various types of information help to understand features of ECEC settings that shape staff's practices with children.

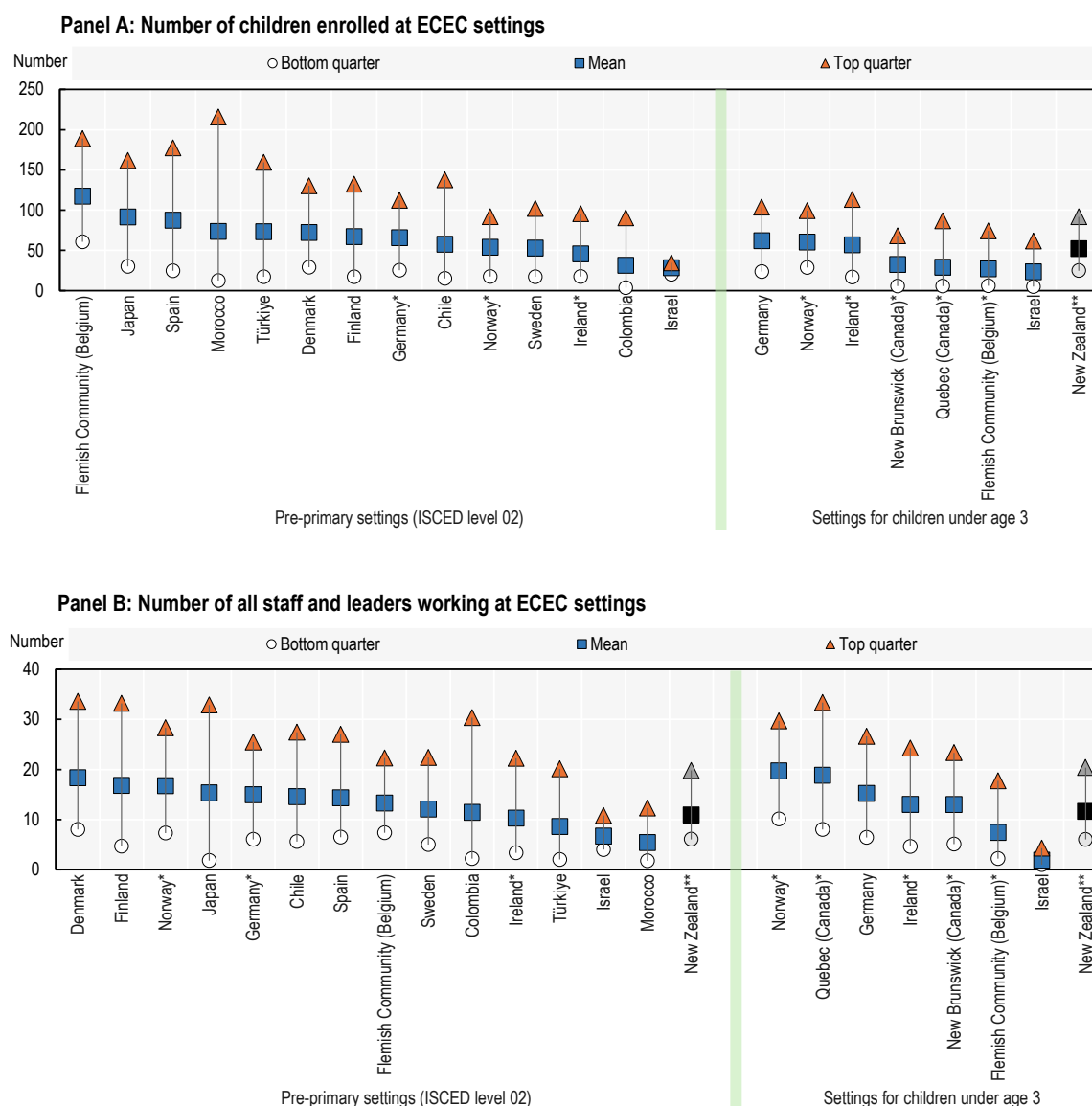
The size of ECEC settings varies across and within countries and subnational entities but tends to be smaller for settings that serve children under age 3

In Colombia (pre-primary) and Israel (both levels), as well as in the Flemish Community of Belgium, New Brunswick (Canada) and Quebec (Canada) (settings for children under age 3), the average setting size is around 30 children or below while it is close to 80 children or above at the pre-primary level in the Flemish Community of Belgium, Japan and Spain (Figure 3.5). There is substantial variation within countries and subnational entities, particularly in Morocco and Spain for pre-primary education. Settings for children under age 3 tend, on average, to be smaller than pre-primary ones and with less variation within countries and subnational entities.

The number of staff in ECEC settings also varies widely across and within systems (Figure 3.5). ECEC settings have, on average, small numbers of staff and leaders in Israel, at both levels but particularly in settings for children under age 3 where it is common to have only one staff member; in pre-primary settings in Morocco and Türkiye; and in settings for children under age 3 in the Flemish Community of Belgium. Numbers of staff are higher on average in Denmark and Finland for pre-primary education, Norway in both levels of education, and in settings for children under age 3 in Quebec (Canada). Within countries, variation is large in Colombia, Finland and Japan for pre-primary education.

Figure 3.5. Size of early childhood education and care settings

Number of children enrolled and number of staff working at ECEC settings, according to leaders



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The national quarter values were derived by calculating percentiles within each country and subnational entity sample. The bottom quarter refers to the 25% of ECEC settings with the fewest number of children enrolled or of all staff and leaders within each country or subnational entity sample. The top quarter refers to the 25% of ECEC settings with the highest number of children enrolled or of all staff and leaders within each country or subnational entity.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order by the mean of the number of staff or the number of children at ECEC settings.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables Leader.22 and Leader.25.

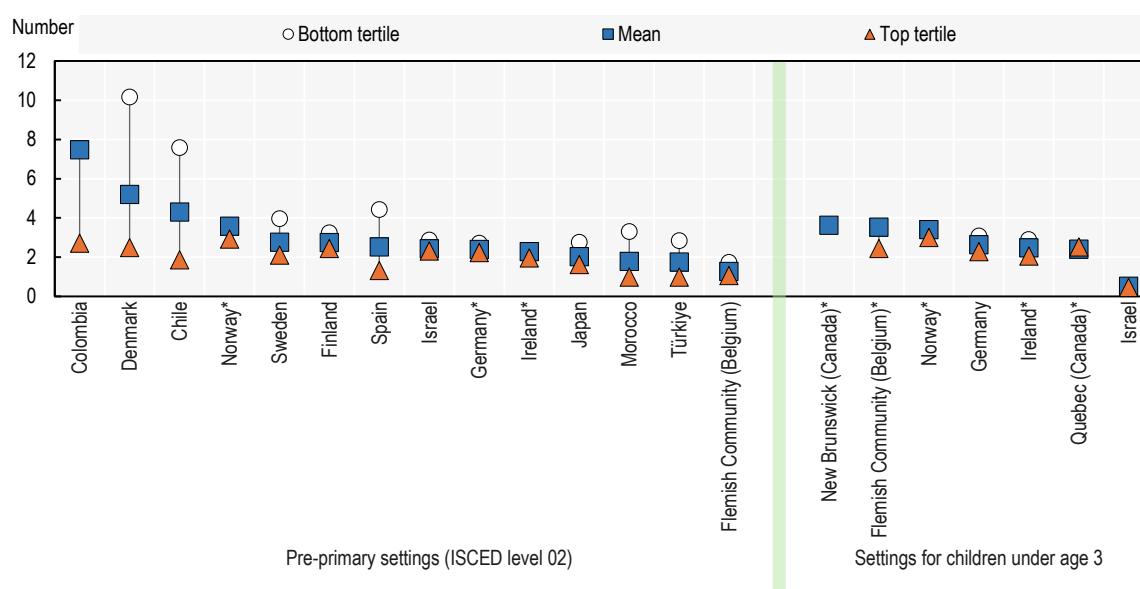
StatLink  <https://stat.link/qjmpkx>

In most ECEC systems, there are typically two or three staff members for every ten children in settings, but these numbers vary and tend to be higher in small settings

The survey allows calculating the total number of leaders and staff in the ECEC setting – including all staff roles and irrespective of their working hours – divided by the number of enrolled children, as reported by setting leaders. This is called the “number of staff per child”. To facilitate comparisons, the ratio is expressed as the number of staff per ten children in the ECEC setting, given its typically small value. Unlike administrative data or regulatory standards, this measure does not distinguish between part-time and full-time staff, or children who attend on a part-time or full-time basis and is done for the entire setting rather than at the group or class/playroom level. Yet the indicator provides insight into the average human resources available to support children’s learning, development and well-being within a setting.

Figure 3.6. Number of staff per ten children in early childhood education and care settings

Average number of staff per ten children by setting size tertiles, according to leaders



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

Notes: Data show setting-level averages. Regulations regarding the number of staff and children in a group often differ depending on the specific ages of children, which can create important differences between the data shown here and group-level data, particularly in age-integrated settings (see Annex A).

The national tertile values were derived by calculating tertiles within each country and subnational entity. The bottom tertile refers to the 33% of ECEC settings with the fewest number of children within each country and subnational entity. The top tertile refers to the 33% of ECEC settings with the highest number of children within each country and subnational entity.

New Zealand is excluded due to small sample sizes.

The figure only shows valid data. Values are not shown because the data were excluded for technical reasons or were based on too few observations to ensure reliability.

ECEC: early childhood education and care.

Countries and subnational entities are ranked in descending order of the average of the number of staff per ten children in ECEC settings.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.3.8.

In most participating countries and subnational entities, the number of staff per ten children at both ECEC levels typically ranges between two and three (see Figure 3.6). But there are notable differences across ECEC systems. For example, this number is more than four in pre-primary settings in Chile, Colombia and Denmark. There are less than two staff for ten children in pre-primary settings in the Flemish Community of Belgium, Morocco and Türkiye and in settings for children under age 3 in Israel.

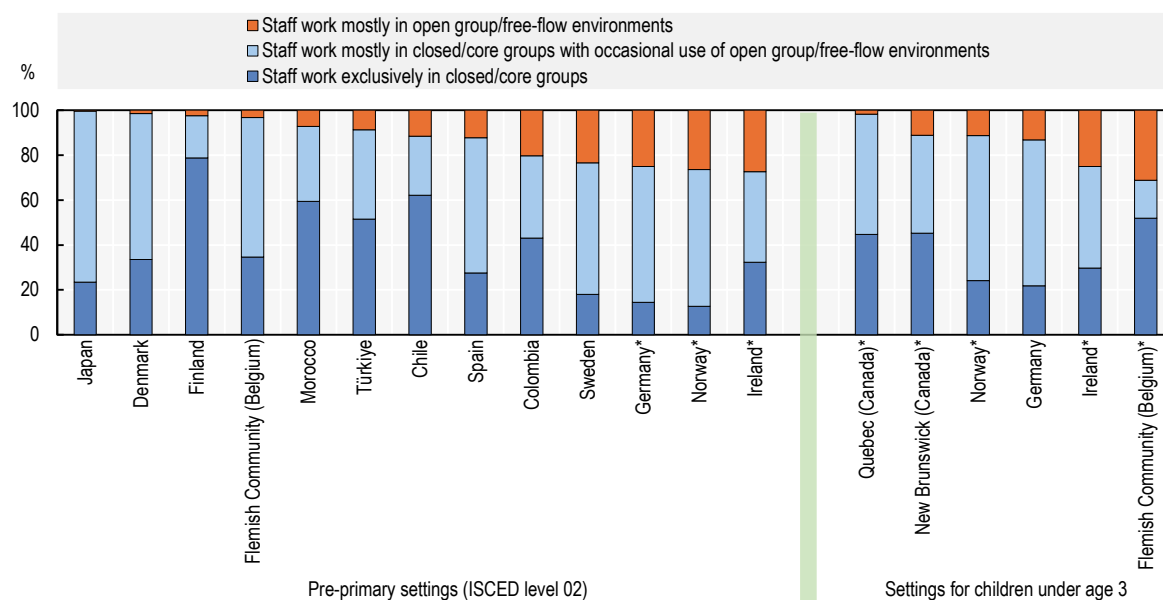
The larger the size of the setting in terms of children enrolled, the lower the number of staff per child. This may imply that increases in child enrolment are not proportionally matched by staffing levels. Moreover, in larger settings, certain staff members – such as leaders – may serve roles that span the entire setting, resulting in a lower overall number of staff working directly with children. Finally, in home-based settings for children under age 3, it is common for one staff to work with a small number of children (see Box 3.1).

ECEC staff generally work with children using a mix of closed groups and free-flow environments

Work organisation in ECEC settings – shaped in part by the size of the setting – can affect staff roles, daily routines and the overall quality of provision. According to leaders without regular responsibilities directly with children (i.e. staff duties), more than one-third of settings are arranged for staff to work in closed groups but occasionally use open group/free-flow environments in a majority of countries and subnational entities (Figure 3.7). Exceptions to this are Chile, Finland, Morocco and Türkiye, where it is more common for settings to be arranged for staff to work exclusively in closed/core groups, and in the Flemish Community of Belgium in settings for children under age 3, where settings more often operate as either closed groups or free-flow groups, rather than occasionally using the free-flow option. In no system are open groups the most common configuration in settings. However, in most systems, there is variation across settings in the organisation of staff's work with children, with some settings using all three types of organisation. Free-flow environments typically require greater numbers of staff per children, strong collaboration among these staff and specific training for staff on working in this manner (Collins, Jones and Tonge, 2022^[17]).

Figure 3.7. Organisation of the work with children in early childhood education and care settings

Percentage of ECEC settings where staff work in open group/free-flow environments or in closed/core groups, according to leaders without staff duties



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

Notes: Israel and New Zealand are excluded due to small sample sizes.

Countries and subnational entities are ranked in ascending order of the percentage of settings in which staff work mostly in open group/free-flow environments.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.3.9.

StatLink  <https://stat.link/41g78l>

Early childhood education and care settings through the lens of children's characteristics and staffing stability

Addressing the needs of all children is a key challenge for ECEC systems at a time when demographic diversity is rising in most countries (González-Sancho et al., 2023^[20]; OECD, 2025^[2]). Diversity refers to children's characteristics as perceived by themselves and/or by others, which may relate to their socio-economic and immigration status; language; mental and physical ability; or race, ethnicity, gender, culture or religion. While these differences can, in themselves, represent advantages for individual children in some cases, research has consistently identified these characteristics as predictors that put children at a higher risk of disadvantage in education and in life more generally (OECD, 2023^[21]). The enrolment of vulnerable children in ECEC is a first step for mitigating inequalities in the early years as these children have the most to gain from high-quality early years learning and development opportunities. However, there is broad evidence that even when enrolled in ECEC, children with these characteristics recurrently experience lower levels of quality than other children (OECD, 2025^[2]).

ECEC settings face staff shortages and turnover that disrupt stable staff-child relationships, which are critical for optimally supporting children's development (Hall et al., 2024^[22]; Herman, Dearth-Wesley and Whitaker, 2023^[23]). Staff absences and shortages also limit possibilities to expand the number of ECEC places (European Commission, 2023^[24]). At the same time, lack of ECEC places, or unmet demand, forces

families onto long waiting lists, and is more likely to affect children from disadvantaged socio-economic backgrounds (Andreella et al., 2024^[25]; OECD, 2025^[2]).

TALIS Starting Strong 2024 asks leaders about the number of children in their settings from a range of backgrounds (Box 3.3). Recognising that even when enrolled in an ECEC setting, children with these characteristics can be more vulnerable, the concentration of children with these characteristics within ECEC settings can be an important indicator of the resources settings need to support all children. The survey also asks leaders about the number of staff who, in the 12 months prior to the survey began working at the ECEC setting, permanently left it or temporarily did not work at it (e.g. for parental leave) as well as about staff who were absent due to sick leave on the most recent Tuesday that the ECEC setting was in session. These data provide unique information on staff turnover and absences. Finally, the survey asks leaders about whether some demand for places for children was unmet in their settings. This section presents the prevalence of these key challenges across and within participating countries and subnational entities while subsequent chapters examine how staff perspectives are shaped by the characteristics of the children with whom they work (see Chapters 5 and 8).

Box 3.3. Definitions of children's demographic characteristics

TALIS Starting Strong 2024 collects the following information about children's characteristics in early childhood education and care (ECEC) settings:

- **Children with a different home language(s)** are children whose home language(s) is/are different from the language(s) used in their ECEC setting.
- **Children with special education needs** are those for whom a special learning need has been formally identified because they have mental, physical or emotional challenges.
- **Children from socio-economically disadvantaged homes** are those for whom their homes lack the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.
- **Children who are immigrants** are those who were born outside the country. A "child with a migrant background" has parents who were both born outside the country.
- **Children who are refugees** are those who, regardless of legal status, have fled to another country to seek refuge from war, political oppression, persecution or a natural disaster, or who were born while their parents were travelling to the destination or shortly after the parents' arrival.
- **Children belonging to ethnic/national minorities or indigenous communities** refer to groups that are a result of historical dynamics and/or shared characteristics that correspond to geographical location and ancestral origins, cultural traditions, religious beliefs, social norms, shared heritage and language, and/or immigrant status and nationality of origin.

In most ECEC systems, vulnerable children are concentrated in a relatively small percentage of ECEC settings

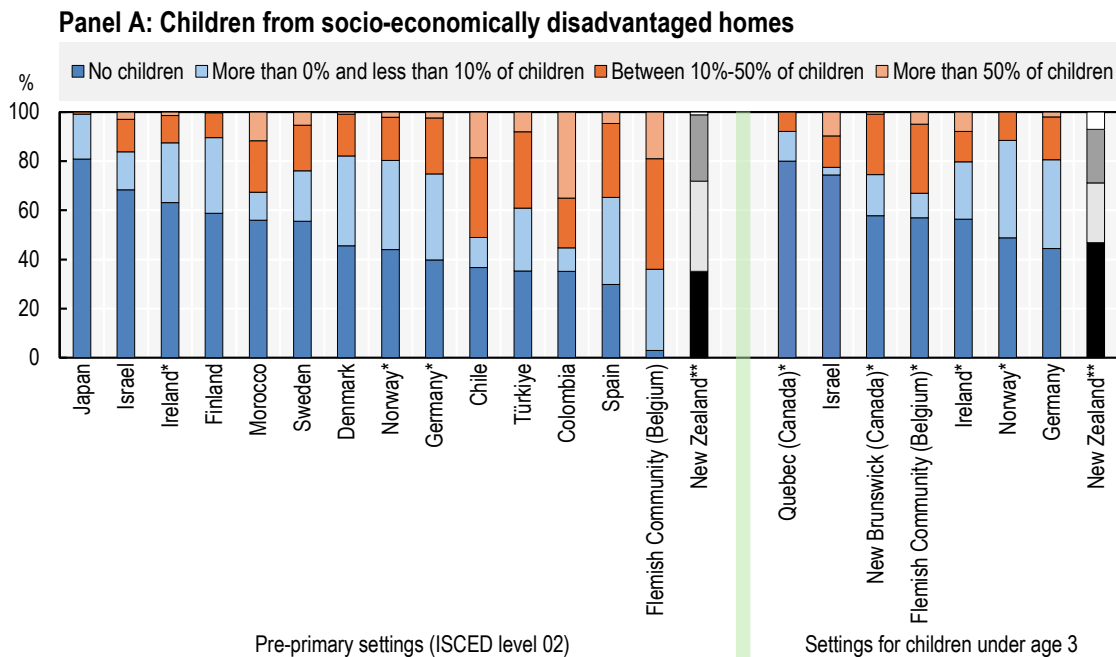
There are large differences across systems in the percentages of enrolled children who face some of these vulnerabilities, which relates to cross-country differences in the socio-economic and immigrant composition of the overall population as well as differences in inclusion and identification policies regarding children with special education needs (Table D.3.10). For instance, large percentages of enrolled children have a different home language than the one used at the setting in pre-primary settings in the Flemish Community

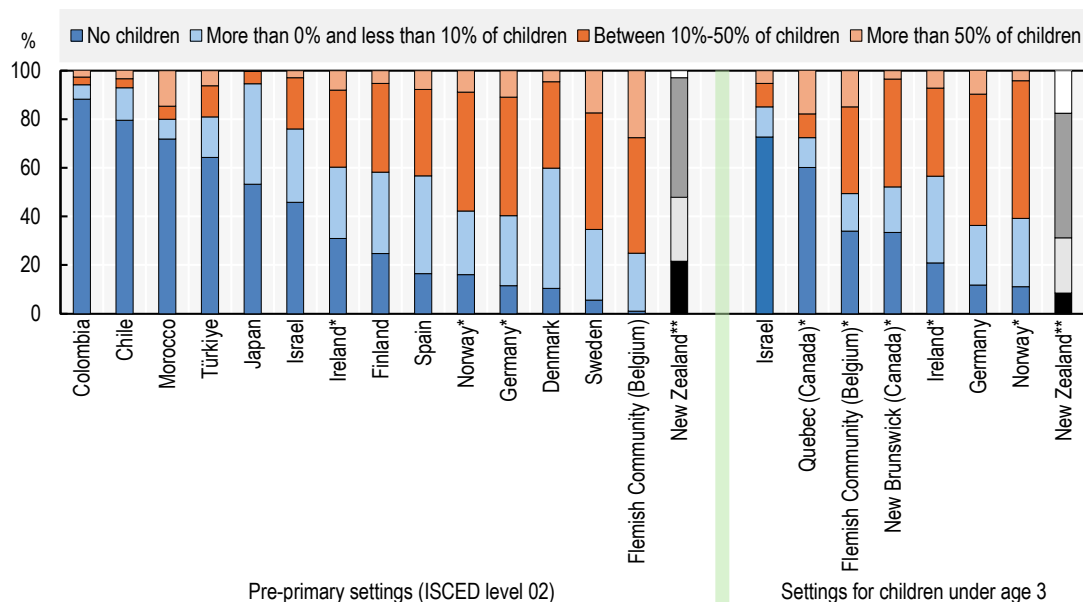
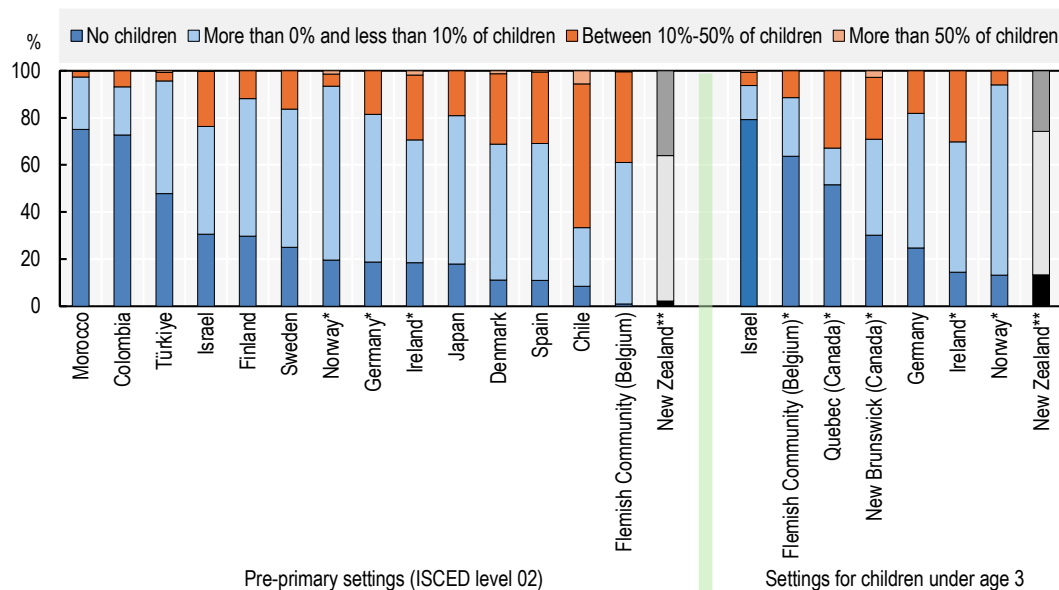
of Belgium and to some extent in Sweden. In the Flemish Community of Belgium and in Colombia, large percentages of children enrolled in pre-primary settings are from socio-economically disadvantaged homes. Special education needs are most prevalent among enrolled children in pre-primary settings in Chile, and to a lesser extent in the Flemish Community of Belgium, Denmark, Ireland and Spain.

However, while the percentages of vulnerable children enrolled in ECEC settings vary across systems, in almost all systems, these children are concentrated in some ECEC settings (Figure 3.8). This is, for instance, reflected in the combination of large percentages of ECEC settings with no children from socio-economically disadvantaged homes together with significant percentages of settings with more than 50% of their children from disadvantaged backgrounds. This is the case in pre-primary education in Chile and Colombia. A similar pattern holds for pre-primary education in Spain and Türkiye, where relatively large percentages of settings have less than 10% of children from socio-economically disadvantaged homes and large percentages of settings have more than 10% of these children. Findings are similar for children with different home language(s) and for children with an immigrant or refugee background (Tables D.3.15 and D.3.16), and children from ethnic/national minorities or indigenous communities (Table D.3.17).

Figure 3.8. Concentration of vulnerable children in early childhood education and care settings

Percentage of ECEC settings by share of children with the following characteristics, according to leaders



Panel B: Children with different home language(s)**Panel C: Children with special education needs**

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Responses reflect ECEC setting leaders' personal perceptions of children's background and may be based on rough estimates.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order by no children with the characteristic at the ECEC setting.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Tables D.3.12, D.3.13 and D.3.14.

Children with special education needs are also concentrated in some settings, although this is less the case than for children with other sources of vulnerabilities (Figure 3.8). This is because this type of vulnerability is overall less frequent, particularly for young children who are rapidly developing and changing and may not have opportunities to be formally diagnosed with a special education need outside of their participation in ECEC.

In most ECEC systems, public ECEC settings are more likely than private ones to serve large shares of vulnerable children

In many ECEC systems, there are smaller percentages of private pre-primary ECEC settings with more than 10% of vulnerable children than there are public ECEC settings with this characteristic (Table 3.2). This is particularly the case for children from socio-economically disadvantaged homes, children with different home language(s) and children with an immigrant background, which are categories that to some extent overlap. For other types of vulnerabilities, differences in the percentages of private and public settings with large shares of vulnerable children exist only in a small number of systems. For settings for children under age 3, differences between private and public settings are less common, with the difference even going in the opposite direction in Quebec (Canada), where there are larger percentages of private settings with large shares of children who have an immigrant background compared to public settings. These results partly come from the high prevalence of private provision in settings for children under age 3.

Average percentages of new staff and absent staff in ECEC settings are high in several countries and subnational entities

In all systems, the percentages of staff who began working in ECEC settings in the 12 months prior to the survey exceed the percentages of staff who permanently left, except in Japan at the pre-primary level, where the two percentages are almost equal (Figure 3.9). Percentages of new staff are particularly high in pre-primary settings in Morocco and in both levels of ECEC in Israel, accounting for more than half of staff. These high rates of staff joining ECEC settings highlight the importance of induction practices (see Chapter 6). In Israel, staff turnover in settings for children under age 3 is relatively high. This likely reflects the large share of very small settings participating in the TALIS Starting Strong 2024 survey, where just one or two staff leaving within a year creates very high rates of turnover.

Table 3.2. Differences between privately and publicly managed settings in their shares of vulnerable children

Differences in the percentages of ECEC settings whose leaders report that there are 10% or more of children with the following characteristics between privately and publicly managed settings

	More common for private settings
	More common for public settings
	Difference is not significant
	Missing values

	Children from socio-economically disadvantaged homes at the ECEC setting	Children whose home language(s) is/are different from the language(s) used at the ECEC setting	Children who are immigrants or with migrant backgrounds at the ECEC setting	Children who are refugees at the ECEC setting	Children belonging to ethnic/national minorities or indigenous communities at the ECEC setting	Children with special education needs at the ECEC setting
Pre-primary settings (ISCED level 02)						
Chile						
Colombia						
Denmark						
Finland						
Flemish Community (Belgium)						
Germany*						
Ireland*						
Israel						
Japan						
Morocco						
Norway*						
Spain						
Sweden						
Türkiye						
<i>New Zealand**</i>						
Settings for children under age 3						
Flemish Community (Belgium)*						
Germany						
Ireland*						
Israel						
New Brunswick (Canada)*						
Norway*						
Quebec (Canada)*						
<i>New Zealand**</i>						

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Responses reflect ECEC setting leaders' personal perceptions of children's background and may be based on rough estimates.

Missing values are due to having too few observations to ensure reliability or because all ECEC settings are officially privately managed (see Box 3.2).

ECEC: early childhood education and care.

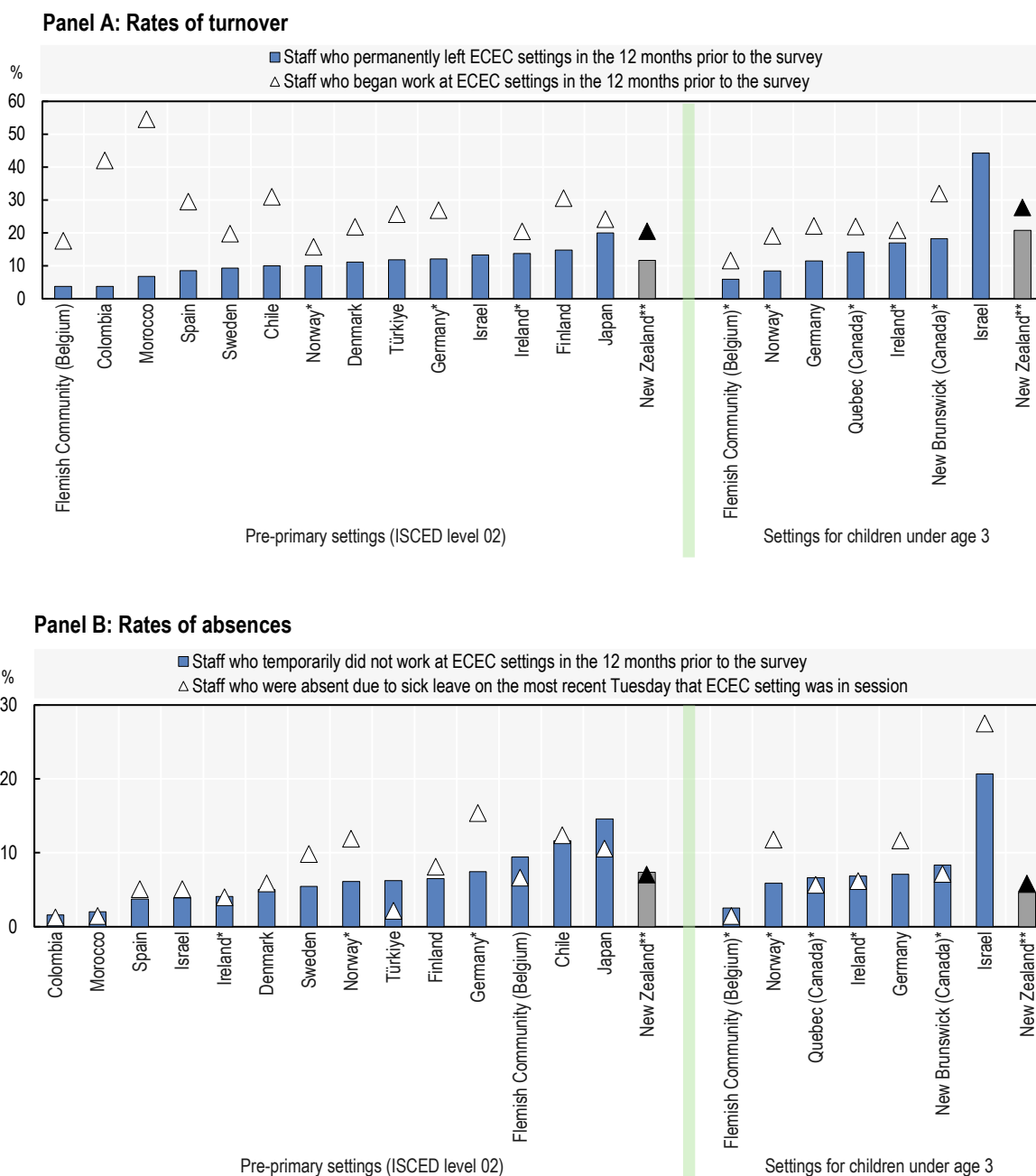
For more information on statistically significant values, see Annex C.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.3.18.

StatLink  <https://stat.link/mnqh0l>

Figure 3.9. Staff turnover and absences in early childhood education and care settings

Percentage of ECEC setting staff who are new, permanently left or were temporarily absent, according to leaders



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in ascending order of staff who permanently left or who temporarily did not work at their ECEC settings in the 12 months prior to the survey.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.3.19.

Percentages of long-term absences, such as extended leave, sabbatical and parental leave, are the highest in Japan for pre-primary settings and in Israel for settings for children under age 3. In these systems, short-term absences (staff who were absent due to sick leave on the most recent Tuesday the setting was in session) are also above 10%, adding to the longer terms ones. Short-term absences are also around 10% or more in pre-primary settings in Chile and Sweden, and at both levels of ECEC in Germany and Norway (Table D.3.19). In Chile and Sweden for pre-primary settings and Germany for both levels of ECEC, leaders report that staff absences are one of the main hindrances to the provision of a quality environment for children's development, well-being and learning (see Chapter 8).

These numbers might be influenced by the number of settings that opened in the 12 months prior to the survey, which would require a fully new team of staff. However, when considered in the context of the relatively small size of ECEC settings compared to higher levels of education, especially for settings for children under age 3, plus the need for ECEC settings to generally meet stricter child-to-staff ratios, they point towards possible challenges for the organisation of ECEC provision linked to staff turnover and absences.

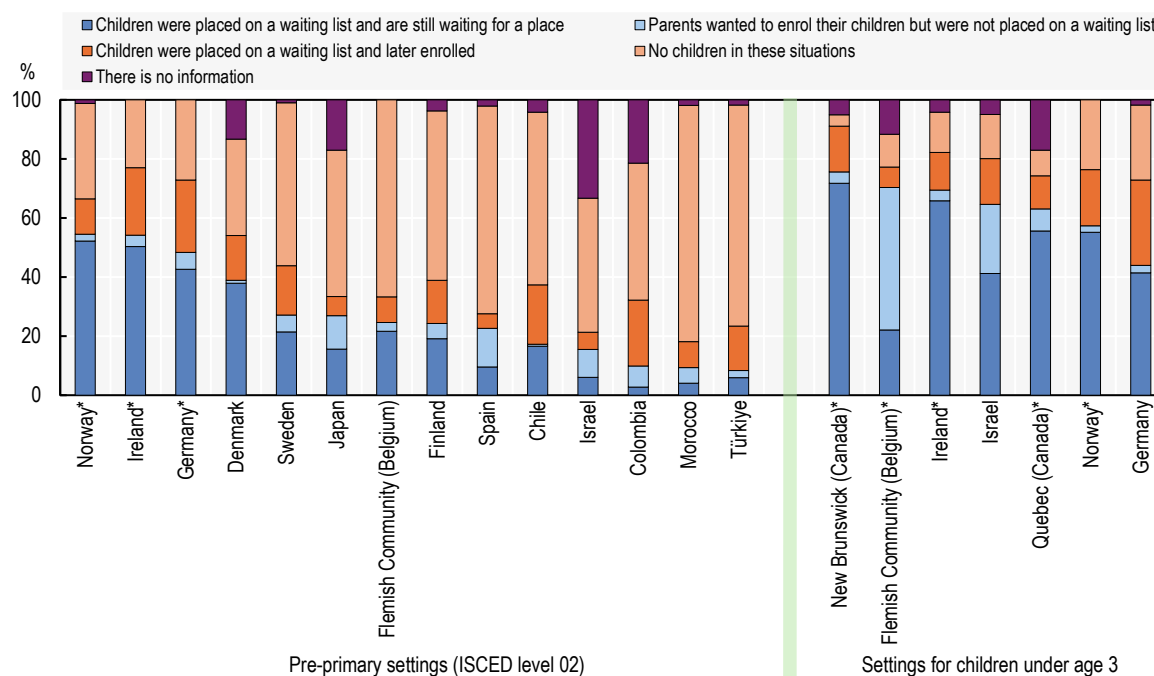
In approximately half of the countries and subnational entities, unmet demand within settings is a significant challenge, especially in settings for children under age 3

In most countries and subnational entities, leaders report that some children could not enrol in their ECEC setting because of a lack of places (Figure 3.10). Percentages of settings with unmet demand are particularly high in pre-primary settings in Germany, Ireland, Norway and in all systems for children under age 3. Germany, Ireland and Norway have high enrolment rates for children aged 3-5 (close to or above 90%; see Annex A), and thus some children may already be enrolled in another ECEC setting. In these countries, high unmet demand may also reflect the integrated nature of ECEC, where settings for children aged 3-5 can also serve younger children. As a result, unmet demand can exist at the setting level even if it is not specific to children of pre-primary age. In contrast, in ECEC settings for children under age 3, the unmet demand at the setting level is more likely to reflect a lack of any opportunity for an ECEC place.

Leaders indicate that children are generally put on a waiting list when there is not an available place, although this is less the case in settings for children under age 3 in the Flemish Community of Belgium. In addition, in several systems, at least 20% of ECEC settings have children who were placed on a waiting list and later enrolled. For families, even if the enrolment difficulties are solved in the end, whether in the same or another ECEC setting, this situation creates uncertainty that can limit parents' ability to make other commitments or return to work on a planned schedule. For ECEC leaders, this situation also contributes to instability in settings where staffing needs and financial demands depend on the precise number and ages of children enrolled at any given moment. Publicly and privately managed ECEC settings are generally equally affected by a lack of available places and the need for waiting lists (Table D.3.20).

Figure 3.10 Unmet demand in early childhood education and care settings

Percentage of ECEC settings whose leaders report the following applied in the 12 months prior to the survey



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

Notes: New Zealand is excluded due to small sample sizes.

ECEC: early childhood education and care.

Countries and subnational entities are ranked in descending order by the sum of children who were placed on a waiting list and are still waiting for a place and children who wanted to enrol but were not placed on a waiting list.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.3.20.

StatLink  <https://stat.link/7yeqdx>

Policy pointers

- **Ensure that the combination of private and public provision promotes equitable access and quality of ECEC.** Most countries and subnational entities build on private ECEC provision to expand enrolment, particularly for children under age 3, which results in a combination of public and private ECEC provision. TALIS Starting Strong 2024 shows that in several systems, public ECEC provision is more common in rural areas and unfavourable neighbourhoods. This can reflect intentional development of public provision in these areas, but it can also lead to a less developed ECEC network, creating barriers for children to be enrolled.

Related to this, publicly managed settings are more likely to enrol high shares of vulnerable children. At the same time, results from the survey indicate higher structural quality in privately managed settings in some systems, which can contribute to a more favourable learning and well-being environment in these settings. Taken together, these results indicate risks that more vulnerable children, who have the most to gain from ECEC, might face more barriers to enrol, or if enrolled, may experience lower quality ECEC.

- **With most ECEC settings, even privately managed, for-profit ones in some systems, benefiting from public funding, it is important to ensure that the entire ECEC system is**

covered by quality regulations and monitoring policies (see Chapter 9). Furthermore, resources can be allocated in a way that leads to more funding to public settings in disadvantaged areas to ensure that these settings can offer similar or even higher quality ECEC than in other areas. In some systems, the combination of public and private ECEC provision does not seem to be associated with inequalities. This is the case in the Flemish Community of Belgium (both levels of ECEC), pre-primary settings in Norway, and settings for children under age 3 in Germany and Quebec (Canada), where there are no apparent differences in the geographical distribution and structural features of quality between publicly and privately managed settings. In addition, in the Flemish Community of Belgium and Germany (both levels of ECEC), no differences are found in the shares of vulnerable children in these two types of ECEC settings.

- **Develop policies to better attract and retain ECEC staff.** This chapter indicates high percentages of new staff and absent staff in ECEC settings in several countries and subnational entities. This suggests high turnover and absenteeism, which can be a key impediment to the functioning of the sector. Chapter 8 discusses directions to better attract and retain ECEC staff and thereby reduce turnover. This chapter suggests that particular attention needs to be placed on large ECEC settings, as having more children (regardless of whether they attend full time or part time) is not proportionally matched with a greater number of staff.

References

- Andreella, A. et al. (2024), *A Two-step Model to Study the Inclusivity's Distribution of Italian Early Childhood Education and Care Services*, <https://arxiv.org/pdf/2407.15610> (accessed on 16 June 2025). [25]
- Baxter, J. and K. Hand (2013), *Access to Early Childhood Education in Australia*, Research Report No. 24, Australian Institute of Family Studies, Melbourne, <https://aifs.gov.au/research/research-reports/access-early-childhood-education-australia> (accessed on 6 June 2025). [7]
- Bowne, J. et al. (2017), "A meta-analysis of class sizes and ratios in early childhood education programs: Are thresholds of quality associated with greater impacts on cognitive, achievement, and socioemotional outcomes?", *Educational Evaluation and Policy Analysis*, Vol. 39/3, pp. 407-428, <https://doi.org/10.3102/0162373716689489>. [14]
- Collins, T., R. Jones and K. Tonge (2022), "Educator perceptions of free-flowing routines in early childhood education and care", *Journal of Early Childhood Research*, Vol. 21/2, pp. 147-161, <https://doi.org/10.1177/1476718x221145476>. [17]
- Dalgaard, N. et al. (2022), "Adult/child ratio and group size in early childhood education or care to promote the development of children aged 0-5 years: A systematic review", *Campbell Systematic Reviews*, Vol. 18/2, <https://doi.org/10.1002/CL2.1239>. [19]
- Dalgaard, N., A. Bondebjerg and L. Svinth (2023), "Caregiver/child ratio and group size in Scandinavian early childhood education and care (ECEC): A systematic review of qualitative research – Scandinavian research in early childhood education and care", *Nordic Psychology*, Vol. 75/4, pp. 397-428, <https://doi.org/10.1080/19012276.2022.2137567>. [18]
- European Commission (2023), *Staff Shortages in Early Childhood Education and Care (ECEC): Policy Brief*, Publications Office of the European Union, <https://doi.org/10.2766/385> (accessed on 14 August 2025). [24]

- González-Sancho, C. et al. (2023), “Levelling the playing field in ECEC: Results from TALIS Starting Strong 2018”, *OECD Education Working Papers*, No. 305, OECD Publishing, Paris, <https://doi.org/10.1787/757e4fea-en>. [20]
- Hall, T. et al. (2024), “Compensation and staffing challenges in child care: Statewide evidence from pandemic relief applications”, *Education Finance and Policy*, Vol. 19/3, pp. 524-537, https://doi.org/10.1162/EDFP_A_00410. [22]
- Herman, A., T. Dearth-Wesley and R. Whitaker (2023), “The association between work as a calling and turnover among early childhood education professionals”, *Early Childhood Education Journal*, Vol. 52/3, pp. 481-491, <https://doi.org/10.1007/S10643-023-01450-6>. [23]
- Howard, S. et al. (2024), “Measuring the quality of adult-child interactions in the context of ECEC: A systematic review on the relationship with developmental and educational outcomes”, *Educational Psychology Review*, Vol. 36/6, <https://doi.org/10.1007/S10648-023-09832-3>. [16]
- Hulpia, H. et al. (2024), *Quality in Early Childhood Education and Care (ECEC): State of Play in the EU Member States Based on the European Quality Framework – Analytical Report*, Publications Office of the European Union, Luxembourg, <https://doi.org/10.2766/932337>. [5]
- Kiviranta, L. et al. (2024), “Outdoor learning in early childhood education: Exploring benefits and challenges”, *Educational Research*, Vol. 66/1, pp. 102-119, <https://doi.org/10.1080/00131881.2023.2285762>. [11]
- Lee, K. (2025), “The racial disparity of access to early childhood education and care by geographical locations among children in poverty”, *Families in Society: The Journal of Contemporary Social Services*, <https://doi.org/10.1177/10443894251318137>. [6]
- Leseman, P. and P. Slot (2025), “Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses”, *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [3]
- Matthews, E. and P. Lippman (2020), “The design and evaluation of the physical environment of young children’s learning settings”, *Early Childhood Education Journal*, Vol. 48/2, pp. 171-180, <https://doi.org/10.1007/S10643-019-00993-X/TABLES/1>. [10]
- OECD (2025), *Education at a Glance 2025: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/1c0d9c79-en>. [4]
- OECD (2025), *OECD Better Life Index*, <https://www.oecd.org/en/data/tools/oecd-better-life-index.html> (accessed on 11 September 2025). [13]
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>. [2]
- OECD (2023), *Equity and Inclusion in Education: Finding Strength through Diversity*, OECD Publishing, Paris, <https://doi.org/10.1787/e9072e21-en>. [21]
- OECD (2017), *Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/9789264276253-en>. [8]
- OECD (forthcoming), *TALIS 2024 Technical Report*, OECD Publishing, Paris, forthcoming. [1]

- Perlman, M. et al. (2017), “Child-staff ratios in early childhood education and care settings and child outcomes: A systematic review and meta-analysis”, *PLoS ONE*, Vol. 12/1, <https://doi.org/10.1371/JOURNAL.PONE.0170256>. [15]
- Pianta, R. et al. (2005), “Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions?”, *Applied Developmental Science*, Vol. 9/3, pp. 144-159, https://doi.org/10.1207/s1532480xads0903_2. [9]
- van Liempd, I., O. Oudgenoeg-Paz and P. Leseman (2020), “Do spatial characteristics influence behavior and development in early childhood education and care?”, *Journal of Environmental Psychology*, Vol. 67, p. 101385, <https://doi.org/10.1016/J.JENVP.2019.101385>. [12]

4

Staff practices with children and time use in early childhood education and care settings

This chapter examines the time early childhood education and care (ECEC) staff spend working in their ECEC in settings. It considers the time staff spend in direct contact with children, as well as the amount of time they allocate to additional work tasks, such as planning and preparing activities or documenting children's development. The chapter then turns to the different practices staff use in their work to support children's development, learning and well-being as well as to adapt to individual children's needs and interests. The chapter also discusses associations between the time spent on different work tasks and staff practices with children.

Key findings

- **Working longer hours does not always translate into more time spent in direct contact with children.** Working hours of full-time staff vary widely across ECEC systems, with the majority of time spent in direct contact with children. Staff in pre-primary settings in Denmark and in settings for children under age 3 in Quebec (Canada) report working among the fewest total hours yet also spend a relatively great number of hours in direct contact with children. In several systems, staff who work long hours tend to spend more time planning and preparing alone, which suggests that completing such tasks contributes to staff working additional hours.
- **Multitasking while in contact with children is common in all systems.** In all systems, most staff report carrying out a range of tasks while in contact with children; planning or preparing activities are the most common.
- **Across all practices staff use to support children's development, those that can be more complicated to implement and may require more specific intention to support children's development are often less frequently used.** More reactive strategies such as responding positively to invitations from children to play or comforting upset children are more common than approaches that actively involve children, which can require more time, preparation or training, such as involving children in making plans for the day or helping children understand their feelings.
- **Overall, practices to support children's social and emotional development are very common across systems, while those to support children's literacy, and particularly numeracy, development tend to be less frequently used.** Notably, literacy and numeracy practices that can be easily integrated into daily rhythms such as reading books and verbalising maths concepts in daily routines tend to be more common.
- **Among approaches to adapt practice to children's individual needs, strengths and interests, giving children different activities to suit their interests is common in all systems.** Recognising children's individual interests regardless of gender and providing different activities to suit different levels of development are also common, reflecting that these are core staff practices in ECEC settings.
- **In some systems, spending more time documenting children's development is associated with greater use of practices to support their development.** This positive association is seen across practices but is particularly common for those that support early literacy development and adaptive pedagogical practices.
- **Staff in a leader or teacher role, compared to assistants or staff in other roles, report greater use of practices to support children's development in several systems.** However, these associations are less common for adaptive pedagogical practices and behaviour support practices.

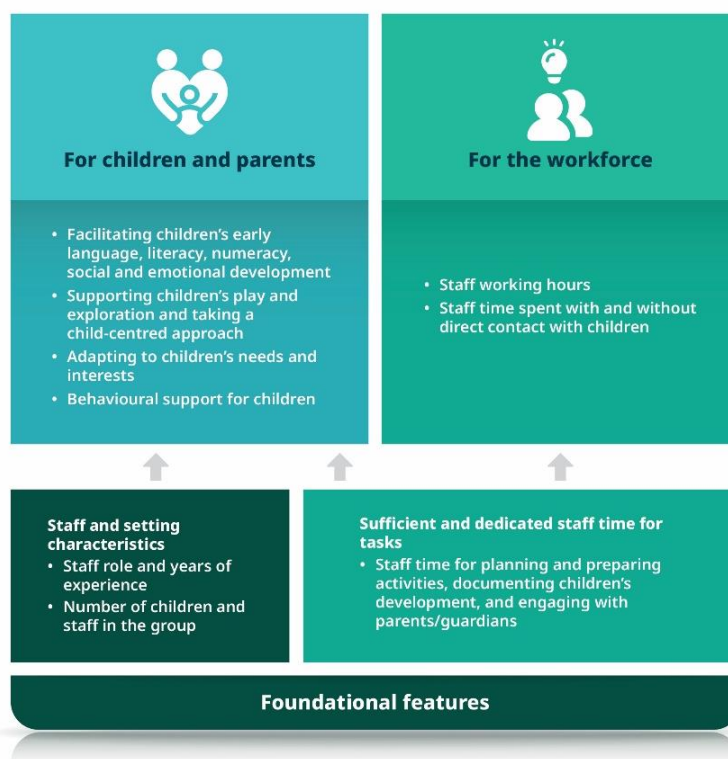
The interactions and experiences children have in ECEC settings, known as process quality, directly influence their learning, development and well-being. Children in settings with more positive interactions between staff and children, or where staff provide higher quality developmental and educational activities, have higher levels of emerging literacy and numeracy skills and better behavioural and social skills (OECD, 2018^[1]). Providing planned, age-appropriate activities that cover all important domains of development within a child-centred, holistic programme can be particularly effective in the short and long terms (Bleses et al., 2021^[2]; Duncan et al., 2023^[3]; Jenkins et al., 2018^[4]; Rege et al., 2024^[5]).

Understanding how ECEC staff time is used, including the extent to which they engage in meaningful interactions with children and use evidence-based practices can, therefore, help ECEC systems identify

their strengths with regard to the quality of provision that children experience in ECEC. To explore this, this chapter uses data from the Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024 to answer the following questions:

- How much time do ECEC staff spend in direct contact with children? What other tasks are most time-intensive for staff? What tasks do staff carry out while they are responsible for supervising children?
- What practices do ECEC staff use with children to support early language, literacy, numeracy, social and emotional skills development? How do ECEC staff support children's play and exploration?
- Do ECEC staff adapt their practices to children's individual interests and needs? How do staff support children's behaviour?
- How do staff practices differ according to staff and setting characteristics?

Figure 4.1. Analytical framework for strengthening practices to support children's development in early childhood education and care



Balancing staff time to support quality practices

Working in ECEC settings involves constant multitasking: balancing direct interactions with children, communication with families, and a range of planning and administrative tasks. Given these competing demands, how staff spend their time is central to supporting quality practices, as well as ensuring that their workload is not a major source of stress (see Chapter 8). Dedicating staff time to tasks such as planning

activities, preparing curriculum implementation and meetings with colleagues allows staff to reflect on which practices can best support children and how to adapt approaches to children's individual needs and interests. Likewise, taking time to record children's development can help staff identify children who need additional supports and recognise milestones in development. However, when these tasks are excessive or their purpose is not clear, this can limit staff opportunities for meaningful engagement with children. Staff time, therefore, needs to be carefully allocated to achieve a balance that supports good process quality.

This section explores how staff use their time differently between and within countries, including the amount of time spent in contact and without contact with children. The section also discusses on which tasks (e.g. planning, documenting children's development and participating in meetings) staff spend the most time, as well as whether staff carry out these tasks while they are responsible for supervising children.

Overall working hours vary widely across systems, as does the number of hours in contact with children

Staff were asked how many hours they spent on tasks related to their job at the ECEC setting during the most recent calendar week, including any work in the evening, on weekends or other out of settings hours, and how much time was spent with and without direct contact with children. The analysis in this section is limited to full-time staff working in a single ECEC setting, to maximise comparability between systems (Table D.4.1).

Average total weekly working hours for full-time staff vary between systems, ranging from 35-38 hours a week in pre-primary settings in Denmark, Morocco and Türkiye and in settings for children under age 3 in Quebec (Canada) and up to 46-47 hours a week in pre-primary settings in Colombia and Japan and in settings for children under age 3 in the Flemish Community of Belgium and New Brunswick (Canada) (Figure 4.2). There is also much variation in the amount of this time staff spend in direct contact with children, ranging from 25 hours per week in pre-primary settings in Colombia and Spain to 37 hours per week in settings for children under age 3 in the Flemish Community of Belgium.

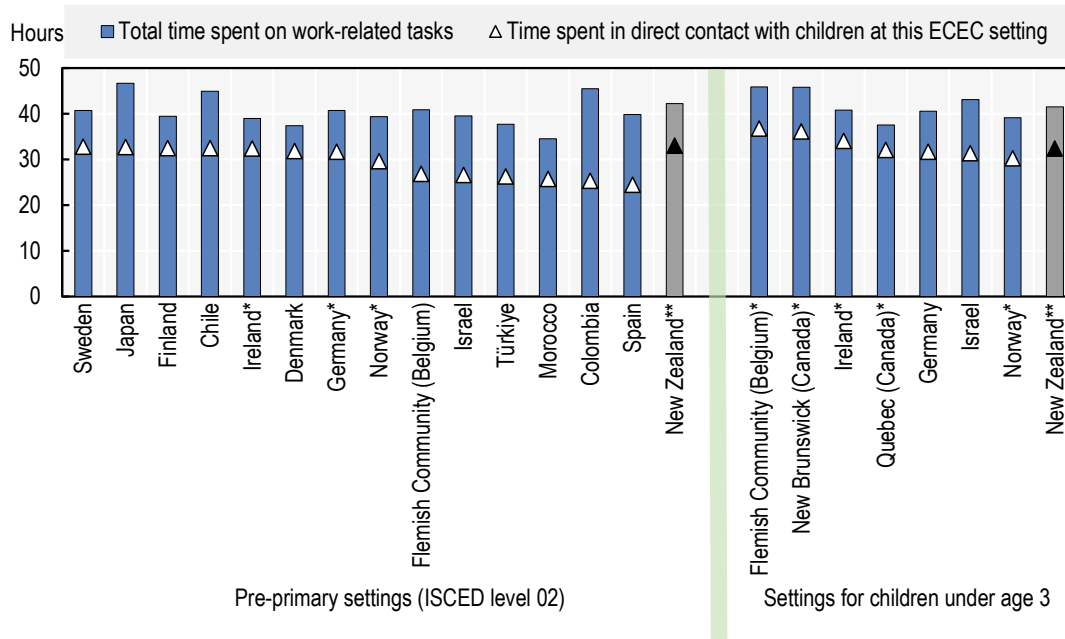
Longer working hours do not always translate into more time spent with children, such as in pre-primary settings in Denmark, where staff report working fewer hours a week than in most other systems yet spend most of that time in direct contact with children. At the other extreme, staff in pre-primary settings in Colombia have some of the least contact hours with children compared to other systems, but among the highest number of overall working hours. However, in settings for children under age 3 in the Flemish Community of Belgium and New Brunswick (Canada), working hours and time with children are more closely linked: staff in both systems have among the longest working hours across countries and subnational entities, as well as the most time in direct contact with children.

In almost all systems, staff spend more time planning and preparing activities than on other tasks, aside from their work directly with children

Considering all staff, regardless of the number of hours they work, time in direct contact with children accounts for the majority of staff working time in their ECEC settings. Staff in pre-primary settings in Colombia report spending the smallest share of their work time when they are at their ECEC setting with children (68%). In contrast, this is largest (90%) in pre-primary settings in Denmark (Table D.4.2).

Figure 4.2. Total staff time spent on work-related tasks and in direct contact with children in early childhood education and care

Average total hours spent on tasks related to the job at this ECEC setting, including outside setting hours, and in direct contact with children, during the most recent complete calendar week, according to full-time staff



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: Only staff who reported working full time in a single ECEC setting and a total time spent on work-related tasks of at least 15 hours per week are included.

Total staff time includes tasks that took place in the evening, on weekends or other out of classroom/playgroup/group/ECEC setting hours (including at home). Staff time spent in direct contact with children includes time when staff were responsible, alone or with colleagues, for children in the same room at the setting.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the number of hours spent in direct contact with children.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.4.1.

StatLink  <https://stat.link/sdax31>

Staff were also asked how much time they spent planning or preparing activities (alone or with other staff); documenting children's development; engaging with parents or guardians; participating in administrative or management tasks; and on routine tasks such as laundry or food preparation during the most recent work week. These activities could overlap with time spent in direct contact with children. Among these activities, staff spend the most time on planning or preparing learning activities in most systems (Table 4.1). Across countries and subnational entities, time spent on planning or preparing activities *alone* is the work-related task that is the most consistently associated with staff reporting working more hours during the most recent work week (Table D.4.4). Some staff may therefore work additional hours to have sufficient time for planning and preparation. These findings underscore the importance of policies that shape the allocation of protected time for work tasks to be done without children (Box 4.1).

Table 4.1. Share of staff time at this early childhood education and care setting spent on different tasks

Average percentage of total time at this ECEC setting spent on the following activities during the most recent complete calendar week, according to staff

	Planning or preparing play and/or learning activities	Documenting children's development, well-being and learning	Collaborating or speaking with parents/guardians	Participating in setting management, staff meetings or general administrative work	Laundry, tidying-up, cleaning, shopping or food preparation tasks
Pre-primary settings (ISCED level 02)					
Chile	30	15	16	12	8
Colombia	42	21	13	16	8
Denmark	6	3	3	5	4
Finland	11	5	6	3	3
Flemish Community (Belgium)	28	9	6	9	17
Germany*	15	6	6	6	7
Ireland*	23	13	7	8	12
Israel	44	20	12	15	22
Japan	22	8	3	9	8
Morocco	35	22	9	10	11
Norway*	11	4	4	7	7
Spain	33	10	6	10	3
Sweden	13	6	5	5	7
Türkiye	30	14	11	8	20
<i>New Zealand**</i>	18	11	11	7	11
Settings for children under age 3					
Flemish Community (Belgium)*	13	8	12	8	16
Germany	13	6	6	6	8
Ireland*	19	11	7	8	14
Israel	32	21	12	11	23
New Brunswick (Canada)*	18	11	8	5	10
Norway*	13	4	5	7	9
Quebec (Canada)*	12	6	5	4	8
<i>New Zealand**</i>	14	8	7	7	10

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The percentage of time for each activity is calculated out of the total time staff spend working at their ECEC setting, which is the sum of time spent in contact and without contact with children. Each activity can overlap with time spent in direct contact with children and can also take place during weekends, evenings or other hours outside the ECEC setting, including at home. The percentage of time spent planning or preparing play and/or learning activities is the sum of time spent on this task alone and with other staff.

The shading of the cells applies horizontally to the ranking of tasks within countries and subnational entities. Within each country and subnational entity, the most frequently reported tasks are indicated in darker shades. The least frequently endorsed practices are indicated in white. Practices for which intermediate percentages of staff report spending time on the task during the most recent calendar week are indicated by intermediate shades. Grey indicates low survey coverage.

ECEC: early childhood education and care.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.4.3.

Box 4.1. Approaches to protecting staff time for work tasks in addition to direct contact with children

Finland gives early childhood education and care (ECEC) teachers, but not assistants, protected time for a wide range of tasks outside their work with children, such as documenting children's development, well-being and learning and participating in setting management and administrative tasks. However, neither teachers nor assistants receive protected time for tasks such as laundry, tidying-up, cleaning, shopping or cooking. This may be related to the fact that the Finnish ECEC curriculum outlines that food education should help children familiarise themselves with foods through the use of different senses and exploration (Kähkönen et al., 2018^[6]): ECEC staff eat with children and this is considered a pedagogical activity. The food is typically provided by central kitchens in support of this pedagogical moment around meals. In contrast, in Türkiye, teachers are given protected time for the full range of activities without children covered in Finland, plus protected time for laundry, tidying-up, cleaning, shopping and cooking (OECD, 2021^[7]).

In Norway, the national curriculum (Framework Plan for the Content and Tasks of Kindergartens) (Norwegian Directorate for Education and Training, 2017^[8]) requires ECEC staff to spend time reflecting on their work and how this is practically applied in the setting (OECD, 2020^[9]). Each ECEC centre is also required to develop an annual plan outlining, among other things, the way the learning areas are adapted to educational activities. ECEC centres, with few exceptions, have set aside five planning days per year for professional and pedagogical development for all staff where the setting is closed to children. The planning days are regulated by the main agreement between employers and employees' organisations, both in the public and private sectors.

In Germany, through the Act on Good Early Childhood Education and Care (2019-2022) and its successor, the Childcare Quality Act (2023-2025), half of the 16 federal states in Germany have opted for government-funded measures to strengthen leadership in childcare centres (Strehmel and Viernickel, 2022^[10]). Having a designated centre leader is mandatory across the federal states but the specific support measures vary, and many designated leaders also have regular duties working directly with children (see the Reader's Guide). One focus is on expanding time resources for management and leadership tasks – for example, through mandatory minimum time budgets for these tasks (e.g. between five and seven hours per week). In some federal states, additional funding has also been invested in leadership training programmes and support for administrative duties (e.g. additional administrative staff).

Multitasking, particularly planning activities while in contact with children, is common in all systems

Staff were also asked whether they engaged in different tasks (planning activities, engaging with parents, management and administrative tasks, and routine tasks such as tidying) while in direct contact with the group of children they worked with the most on their last working day (the target group). Overall, it is common for staff to perform a variety of such tasks while in contact with children (Table Staff.38). In all systems, most staff say they plan or prepare activities alone while in direct contact with children, while most staff also report doing so with other ECEC staff in all systems except in pre-primary settings in the Flemish Community of Belgium and settings for children under age 3 in Quebec (Canada). Engaging with parents or guardians while working with children is also common, with half or more staff saying they did this in nearly all systems.

The greatest variation across systems is whether staff performed routine tasks (such as laundry and food preparation) while in direct contact with children. In some systems, most notably pre-primary settings in

Chile, Colombia, Spain and Türkiye, this was the least common of the tasks carried out while with children. But in almost half of systems, it was the most common. In most systems, a minority of staff report conducting administrative or management tasks while with children. However, this is more common in some systems, including pre-primary settings in Chile, Colombia and Türkiye. These results may reflect different approaches to incorporating such tasks into children's learning and experiences. For example, children may benefit from observing staff carrying out everyday tasks such as cooking or tidying or participating in such tasks themselves (Box 4.1).

Supporting children's early development

Young children grow and learn through play, exploration and connection with others, and thrive in environments that make space for this (Hirsh-Pasek et al., 2008^[11]). Through the provision of rich, enjoyable interactions and experiences, high-quality ECEC settings can support children's well-being, development and social integration. These early years also offer a key opportunity to support more equitable long-term outcomes in all areas of children's development – including social and emotional development, as well as early language, literacy and numeracy skills – before primary school begins (OECD, 2025^[12]). There is a need to support all these areas from an early age, yet approaches to support children's early development vary and a greater focus is placed on some areas of development compared to others across ECEC systems.

This section discusses staff reports of the different approaches and activities they use during their work week to facilitate children's social and emotional and early literacy and numeracy development. It also captures practices to support early language development in the context of a specific group of children (the target group). TALIS Starting Strong 2024 data build a rich picture of how staff and, by extension, the children they work with, spend their time in ECEC settings.

Staff in most systems report using practices to support children's social and emotional development more often than those to support literacy and numeracy development

Practices to support children's social and emotional development, such as encouraging them to help each other and express their feelings, are very common in ECEC settings (Table 4.2). Across all the practices staff use during the work week in the domains of social and emotional development, play and exploration, and literacy and numeracy development, in all systems at least four of five of those most commonly used are those that support children's social and emotional development (Tables D.4.5, D.4.6, D.4.7, D.4.8 and D.4.9). Practices to support literacy and numeracy development tend to be less common, particularly numeracy. Activities such as singing songs with numbers and playing number games tend to be among the least commonly used of all practices across participating countries and subnational entities.

Children's social and emotional development is often prioritised in the early years as it can be foundational for other areas of learning (Denham and Zinsler, 2014^[13]; Zins et al., 2007^[14]). For example, children who can regulate their emotions and take turns can more easily engage with learning and build positive relationships. In addition, while social and emotional development can be influenced by experiences and environments throughout one's life, early experiences can have the most long-term impact. At the same time, it is important that primary and secondary education build on what children have learnt during the early years. This is increasingly recognised, with such skills often included in primary and secondary curricula (OECD, 2024^[15]).

Encouraging children if they help each other, encouraging sharing and comforting upset children are typically the most common social and emotional development practices

Staff were asked how often during their work week they used four different practices to support children's social development and four to support their emotional development. Overall, supporting children's social and emotional development is very common, with around half or more staff in all systems saying they did each of these eight practices at least daily (Table 4.2). These are also areas that staff view as among the most important for children to prepare them for life in the future (Table Staff.25).

Across all social and emotional practices, encouraging children to help each other was the most common, while more intentional strategies to support children's emotion regulation – talking with children about feelings or helping them understand their feelings – were less common in most systems. These approaches can help children identify and understand their emotions, yet may be more time-consuming and require specific training or expertise to implement (Harrington et al., 2020^[16]; Thümmeler, Engel and Bartz, 2022^[17]). In pre-primary settings in Colombia and Israel, staff report using all practices to support social development more often than those to support emotional development.

Among practices to support social development, encouraging children to help each other and to share are more common than encouraging them to include others or to comfort each other in many systems, particularly in pre-primary settings in Japan and Sweden, settings for children under age 3 in Germany, and in both levels of ECEC in the Flemish Community of Belgium. ECEC has a central role in supporting young children's opportunities to socialise outside their home contexts, with opportunities to practice prosocial skills with similar-age peers. Encouraging children to share and help one another contributes to a positive climate in ECEC settings that is likely self-reinforcing, as both staff and children benefit from this type of atmosphere. Encouraging children to include and comfort one another may be somewhat more complex to implement as frequently, although these are important strategies to foster children's development of empathy. In terms of emotional development, staff report comforting upset children more often than talking about and helping them to understand their feelings, most notably in the Flemish Community of Belgium and Germany (at both levels of ECEC).

Practices to support early language development are common, particularly asking children questions to help them express their ideas

Creating environments that support children's early language development is particularly important. Language development takes place earlier than many other domains and is foundational for high-order skills, from forging social relationships to understanding numeracy concepts. ECEC staff were asked how often they use six different practices to support children's early language development in the target group.

Almost all staff in both levels of ECEC regularly engage in practices to support children's language development (Table 4.3). Asking children questions to help them express their ideas was very common in all pre-primary systems and the most frequent practice in all these systems except in Denmark, the Flemish Community of Belgium and Norway. Using new words or phrasing was the least common practice in most pre-primary systems as well as in settings for children under age 3.

Encouraging children to lead conversations and asking supportive questions to encourage longer explanations were also common practices in almost all pre-primary systems. Notable exceptions are Finland and Germany, where over half of staff said they encourage children to lead conversations only occasionally or less often. In Japan, the same was true for asking supportive questions. In countries and subnational entities with data for both levels of ECEC, staff in settings for children under age 3 report encouraging children to lead conversations and asking supportive questions less often than pre-primary staff, with particularly pronounced differences in the Flemish Community of Belgium, Israel and Norway. Such differences likely reflect the less developed language skills of children under age 3 compared to

children of pre-primary age and the appropriate adaptations staff make in their practices for different age groups.

Approaches to support play and exploration that intentionally build children's agency are used less often than more reactive or observational strategies

Staff were asked how often during their work week they use three different practices to support children's play and four practices related to child-centred planning. Across these practices, those that facilitate play are more commonly used than child-centred planning practices, particularly involving children in making plans for the day and planning activities that allow children to take the initiative (Table 4.4). These practices emphasise children's agency and autonomy, but they may also be more time-consuming or demanding for staff to implement than more reactive or observational strategies that facilitate play. However, in pre-primary settings in Colombia and the Flemish Community of Belgium, activities that allow children to take the initiative are among the most common, while this is the case for involving children in plans for the day in Morocco.

Responding positively to non-verbal invitations to play was one of the three most common practices in all systems except pre-primary settings in Israel and Morocco. This is particularly common in settings for children under age 3. Letting a child play alone when they are deeply engaged in play is also common in most systems, although it is among the three least common practices in pre-primary settings in Chile, Colombia, Morocco, Norway, Spain and Türkiye. This likely reflects the different role that independent play is given both culturally and in different curricula.

Practices to support literacy development tend to be used more often than those to support numeracy development

Staff were asked how often in their work week they use eight different practices to support literacy development, such as reading books or singing songs, and six practices to support numeracy development, such as playing number games and helping children to count.

Across these 14 different practices, those that support literacy development are typically used more frequently than those that support numeracy development (Table 4.5 and Table 4.6). Singing songs with children is the most common practice in all systems at both levels of ECEC, except in Finland and Sweden. Reading books is among the top three practices in around half of pre-primary systems and all systems for children under age 3, while asking questions while reading books is also common in many systems.

On the other hand, several practices to support numeracy development were among the least used practices in over half of systems: encouraging children to measure items, playing number games, singing songs with numbers, and sorting activities by shape or number. These practices may be less frequent by nature, as they are less easily integrated into daily rhythms and can require planning or use of certain equipment. Indeed, most staff in all pre-primary systems and most systems for children under age 3 say they play number games and do sorting activities by shape or number at least once a week; these activities are more likely to require specific materials. Numeracy practices that can be more easily integrated into daily activities, verbalising maths concepts in everyday routines, and helping children to use numbers or to count, tend to be more common.

Most practices to support numeracy development were much more common in pre-primary settings than in settings for children under age 3 in the Flemish Community of Belgium and Israel, which aligns with the fact that there are different curriculum frameworks for the two levels of ECEC in these systems (see Annex A). These two systems are also split, such that children under age 2.5 or 3 are not in the same settings or groups as their older ECEC-age peers. As such, staff may engage less frequently in practices that involve some level of autonomy from children, such as measuring or sorting.

Table 4.2. Practices to support children's social and emotional development in early childhood education and care

Percentage of staff who report using each practice once a day or more during the most recent complete calendar week

	Social development				Emotional development			
	Encourage sharing	Encourage helping each other	Encourage including others	Encourage comforting each other	Talk about feelings	Help understand feelings	Comfort upset children	Help express feelings
Pre-primary settings (ISCED level 02)								
Chile	96	96	93	84	86	86	92	92
Colombia	81	83	83	79	65	67	74	75
Denmark	90	94	86	86	85	84	96	91
Finland	82	87	80	69	77	75	86	81
Flemish Community (Belgium)	84	90	71	76	70	71	88	79
Germany*	61	72	63	50	50	51	72	60
Ireland*	97	97	94	92	81	83	93	92
Israel	85	88	86	84	72	73	82	81
Japan	70	71	49	54	61	69	72	75
Morocco	72	82	75	71	53	57	68	72
Norway*	92	89	83	82	83	82	97	90
Spain	91	92	88	90	84	84	90	87
Sweden	86	89	74	74	78	74	89	81
Türkiye	89	90	81	84	60	70	76	80
<i>New Zealand**</i>	88	91	80	85	79	78	88	86
Settings for children under age 3								
Flemish Community (Belgium)*	87	84	60	78	73	70	94	82
Germany	65	71	59	49	53	54	78	60
Ireland*	96	96	90	92	77	80	93	90
Israel	82	87	79	80	71	71	82	76
New Brunswick (Canada)*	93	89	83	84	79	81	91	88
Norway*	95	96	82	91	85	83	99	91
Quebec (Canada)*	91	88	79	84	77	80	91	88
<i>New Zealand**</i>	94	98	88	92	89	87	97	92

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to support both social and emotional development within countries and subnational entities. Within each country or subnational entity, the most frequently reported practices for supporting social and emotional development are indicated in darker shades. The least frequently reported practices are indicated in white. Practices for which intermediate percentages of staff reported using the practice once a day or more are indicated by intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.4.5 and D.4.6.

StatLink  <https://stat.link/ezmrt>

Table 4.3. Practices to support children's early language development in early childhood education and care

Percentage of staff who report using each practice "often" or "always" with the target group

	Encouraged children to lead conversations	Asked supportive questions to encourage children to give longer explanations	Supported children to express their ideas by asking them questions	Rephrased or repeated statements to make sure I understood the children	Modelled the correct word rather than corrected children directly	Used words or phrasing that was new to children
Pre-primary settings (ISCED level 02)						
Chile	80	85	95	92	91	86
Colombia	73	77	87	82	83	70
Denmark	85	76	78	78	57	37
Finland	33	78	88	79	67	28
Flemish Community (Belgium)	58	85	80	84	91	64
Germany*	48	67	80	75	79	26
Ireland*	89	90	95	90	88	63
Israel	84	85	86	74	77	69
Japan	60	40	71	71	60	43
Morocco	80	79	91	90	80	66
Norway*	52	65	77	75	86	30
Spain	92	89	94	92	90	74
Sweden	75	81	86	80	74	53
Türkiye	86	85	96	88	90	80
<i>New Zealand**</i>	85	84	94	88	88	59
Settings for children under age 3						
Flemish Community (Belgium)*	46	65	56	74	73	49
Germany	43	63	76	80	82	29
Ireland*	87	86	93	91	87	65
Israel	68	67	66	71	69	59
New Brunswick (Canada)*	82	78	88	91	83	70
Norway*	41	51	72	76	83	37
Quebec (Canada)*	69	75	86	90	83	59
<i>New Zealand**</i>	80	82	90	89	88	71

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to support language development within countries and subnational entities. Within each country or subnational entity, the most frequently reported practices for supporting language development are indicated in darker shades. The least frequently reported practices are indicated in white. Practices for which intermediate percentages of staff reported using the practice "often" or "always" are indicated by intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.4.10.StatLink  <https://stat.link/1keovu>

Table 4.4. Practices to facilitate children's play and child-centred planning in early childhood education and care

Percentage of staff who report using each practice once a day or more during the most recent complete calendar week

	Facilitating play			Child-centred planning			
	Allowed children to take the lead when I played with them	Responded positively to non-verbal invitations to play	Let a child play alone if they were deeply engaged in play	Intentionally organised the group/space to facilitate children's exploration and play	Planned activities designed to allow children to take the initiative	Involved children in making plans for the day	Adapted daily activities in response to children's natural rhythms
Pre-primary settings (ISCED level 02)							
Chile	71	83	67	76	67	61	73
Colombia	63	70	49	65	65	59	62
Denmark	76	77	79	62	62	40	65
Finland	54	58	62	41	34	19	57
Flemish Community (Belgium)	45	69	71	67	67	36	45
Germany*	46	59	65	42	37	46	52
Ireland*	90	91	88	80	78	68	79
Israel	65	57	59	54	52	56	62
Japan	71	71	69	28	39	16	44
Morocco	45	42	37	50	43	49	58
Norway*	73	74	67	67	56	36	76
Spain	71	78	66	71	69	54	80
Sweden	55	71	61	69	46	26	64
Türkiye	73	82	54	67	58	71	76
<i>New Zealand**</i>	85	83	82	78	74	56	72
Settings for children under age 3							
Flemish Community (Belgium)*	71	89	88	80	65	41	80
Germany	53	76	77	46	39	42	62
Ireland*	88	91	86	78	76	67	78
Israel	67	71	74	62	57	60	72
New Brunswick (Canada)*	79	84	79	62	63	53	67
Norway*	84	89	79	68	61	32	85
Quebec (Canada)*	81	86	81	67	60	43	72
<i>New Zealand**</i>	86	94	93	83	74	60	77

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to support play and exploration within countries and subnational entities. Within each country and subnational entity, the most frequently reported practices to facilitate play and child-centred planning are indicated in darker shades. The least frequently reported practices are indicated in white. Practices for which intermediate percentages of staff reported using the practice once a day or more are indicated by intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.4.7.

Table 4.5. Practices to support children's early literacy development in early childhood education and care

Percentage of staff who report using each practice once a day or more during the most recent complete calendar week

	Played word games with the children	Read books to children	Asked questions when reading books to children	Encouraged pre-verbal children to point to pictures when looking at a book	Sang songs with or to the children	Engaged children in activities that helped them pick out sounds in words	Used synonyms for words to help explain their meaning when talking with children	Used activities for children to make marks
Pre-primary settings (ISCED level 02)								
Chile	59	67	70	72	90	75	69	73
Colombia	54	60	60	60	76	68	65	67
Denmark	35	42	42	26	66	26	41	22
Finland	13	48	41	33	43	14	34	11
Flemish Community (Belgium)	39	61	63	48	78	28	49	55
Germany*	25	46	46	38	60	16	20	26
Ireland*	29	85	82	71	88	48	48	80
Israel	57	59	58	47	74	58	60	62
Japan	52	64	48	23	72	29	65	14
Morocco	47	42	48	60	73	51	71	52
Norway*	30	51	50	32	79	21	36	11
Spain	64	55	58	57	80	73	64	65
Sweden	36	68	62	47	60	30	49	18
Türkiye	32	69	71	53	75	46	43	51
<i>New Zealand**</i>	31	76	75	62	83	41	47	75
Settings for children under age 3								
Flemish Community (Belgium)*	35	56	56	49	84	56	44	30
Germany	27	53	52	48	69	22	27	26
Ireland*	30	84	79	75	90	53	52	75
Israel	52	69	65	65	85	59	51	53
New Brunswick (Canada)*	39	82	82	78	83	56	55	62
Norway*	31	69	64	65	92	34	43	20
Quebec (Canada)*	45	78	69	66	82	46	51	30
<i>New Zealand**</i>	30	83	79	65	90	36	52	69

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to support early literacy development within countries and subnational entities. Within each country or subnational entity, the most frequently reported practices for early literacy development are indicated in darker shades. The least frequently reported practices are indicated in white. Practices for which intermediate percentages of staff reported using the practice once a day or more are indicated by intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.4.8.

StatLink  <https://stat.link/rkd18x>

Table 4.6. Practices to support children's early numeracy development in early childhood education and care

Percentage of staff who report using each practice once a day or more during the most recent complete calendar week

	Used sorting activities by shape or colour	Played number games	Sang songs with numbers	Helped children to use numbers or to count	Verbalised maths concepts in everyday routines	Encouraged children to measure items
Pre-primary settings (ISCED level 02)						
Chile	42	53	53	67	69	40
Colombia	50	45	45	48	51	46
Denmark	14	18	13	53	54	13
Finland	7	12	5	33	59	11
Flemish Community (Belgium)	27	35	21	50	75	24
Germany*	23	19	7	44	54	16
Ireland*	51	42	59	69	67	44
Israel	43	53	40	63	64	48
Japan	14	18	12	38	62	29
Morocco	37	38	57	62	58	29
Norway*	15	12	17	52	60	18
Spain	45	62	50	74	76	36
Sweden	30	24	18	54	70	25
Türkiye	36	45	36	63	58	39
<i>New Zealand**</i>	47	38	52	71	67	40
Settings for children under age 3						
Flemish Community (Belgium)*	22	10	31	20	28	11
Germany	23	15	11	40	45	14
Ireland*	49	36	59	63	63	40
Israel	44	36	43	49	48	41
New Brunswick (Canada)*	43	33	49	54	55	41
Norway*	16	8	26	49	56	15
Quebec (Canada)*	30	25	38	41	54	32
<i>New Zealand**</i>	44	39	60	72	64	32

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to support early numeracy development within countries and subnational entities. Within each country or subnational entity, the most frequently reported practices for early numeracy development are indicated in darker shades. The least frequently reported practices are indicated in white. Practices for which intermediate percentages of staff reported using the practice once a day or more are indicated by intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.4.9.

StatLink  <https://stat.link/u2qax6>

Responding to the interests and needs of individual children

Focusing and responding to the strengths and needs of children has the potential to improve the quality of ECEC experiences for all children (OECD, 2025^[18]). Staff use of adaptive practices, such as offering different activities to suit children's interests, can make ECEC settings more inclusive of children's diverse needs, backgrounds and stages of development. Staff also need to support children to learn to play together in a group setting and support them to regulate their behaviour in accordance with group expectations.

This section discusses staff approaches to adapt their practices and support children's behaviour while in direct contact with the group of children they worked with the most on their last working day (the target group). Results are also presented from questions which asked staff how they would typically respond in scenarios that require them to balance individual children's interests or behaviours with planned activities or expectations for the group of children as a whole.

In all systems, most staff propose different activities to suit children's interests while explaining how activities relate to their lives is less common in some systems

ECEC staff were asked how often they use six different approaches to adapt their practice to children's needs and interests in the target group. Two of these approaches include how often staff explain how a new activity relates to children's lives and provide different activities to suit children's interests in the context of the target group. This type of intentional pedagogy is viewed as a key marker of high-quality practice in ECEC as it requires staff to blend their knowledge of child development and curricular goals with their understanding of individual children in the classroom or playgroup context (OECD, 2025^[19]). In all systems at both levels of ECEC, most staff say they often or always give children different activities to suit their interests (Table 4.7). There is greater variation in whether staff explain how new activities relate to children's lives. In most systems, a much smaller share of staff report doing this compared to giving activities to suit children's interests. This was most notable in pre-primary settings in Denmark; settings for children under age 3 in Quebec (Canada); and for both levels of ECEC in the Flemish Community of Belgium, Germany, New Zealand** and Norway.

The other practices include how often staff adapted their practice to aspects of diversity among children in the target group, specifically children's level of development, cultural or linguistic background, and gender. Use of such practices is linked with staff practices to promote awareness and acceptance of diversity among children (see Chapter 5). However, recognising children's individual interests regardless of gender and providing different activities to suit different levels of development are often more common than adaptations for children's cultural and linguistic background, which may reflect that the former are core practices in ECEC settings, as they apply to almost any group of children. In contrast, culturally and linguistically homogenous groups still prevail, despite increasing diversity among children in ECEC, leading to less need for staff in such contexts to adapt their practices in these areas. In addition, staff tend to report a high level of need for ongoing professional development on working with children whose home language is different than the language of the ECEC setting (see Chapter 6), suggesting staff may need more support to adapt their practices in this area.

Table 4.7. Use of adaptive practices in early childhood education and care

Percentage of staff who report using each practice “often” or “always” with the target group

	I explained how a new activity relates to children's lives	I gave different activities to suit different children's interests	I gave different activities to suit different children's levels of development	I adapted my activities to children's cultural background	I recognised children's individual interests regardless of gender	I adapted my activities to meet the needs of dual/second language learners
Pre-primary settings (ISCED level 02)						
Chile	78	84	84	64	88	43
Colombia	79	83	81	66	82	48
Denmark	27	68	80	24	88	36
Finland	34	56	70	15	79	39
Flemish Community (Belgium)	35	80	86	19	64	55
Germany*	22	63	71	23	83	50
Ireland*	60	82	84	49	92	53
Israel	61	71	73	44	74	38
Japan	46	66	64	17	76	7
Morocco	71	79	82	65	78	49
Norway*	18	68	65	17	75	42
Spain	67	90	91	48	89	49
Sweden	43	73	81	24	91	53
Türkiye	80	61	66	51	85	30
<i>New Zealand**</i>	36	85	89	46	94	55
Settings for children under age 3						
Flemish Community (Belgium)*	26	65	68	16	69	26
Germany	17	62	71	20	83	41
Ireland*	58	84	84	55	92	57
Israel	48	68	71	41	64	36
New Brunswick (Canada)*	47	81	80	47	88	60
Norway*	14	71	70	17	75	35
Quebec (Canada)*	39	86	88	30	91	42
<i>New Zealand**</i>	48	83	85	46	90	53

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of adaptive practices within countries and subnational entities. Within each country or subnational entity, the most frequently used adaptive practices are indicated in darker shades. The least frequently reported adaptive practices are indicated in white. Practices for which intermediate percentages of staff reported using the practice “often” or “always” are indicated by intermediate shades. Grey indicates low survey coverage.

The “target group” refers to the group of children with whom staff worked the most on their last working day before the survey.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.4.11.StatLink  <https://stat.link/vcdbqk>

ECEC staff report often showing appreciation to children behaving well, explaining rules to children and explaining why they should stop when behaviour is disruptive

ECEC staff were asked how often they use different strategies to support children's behaviour in the target group setting. In all pre-primary systems, a large share of staff (over 70%) say they often or always show appreciation to children that behave well, explain rules to children before an activity, and explain why they should stop when their behaviour is disruptive (Table 4.8). Staff appear to adapt their strategies when working with younger children. While showing appreciation is very common in all systems for children under age 3, both explaining rules and why behaviour should stop are often used less frequently compared to settings for older children.

Dividing materials to avoid conflicts and redirecting children when they disturb other children are the least commonly used behaviour support strategies in most, but not all, systems (Table 4.8). These strategies do not directly respond to behaviours that may be challenging in a group setting. Staff may rely on them less if they feel indirect or preventative approaches are less effective in supporting children to learn how to play together. Helping children understand consequences when they do not follow rules is also less common than most other strategies in some systems, notably pre-primary settings in Denmark, Finland and Sweden and in both levels of ECEC in the Flemish Community of Belgium, Germany and Ireland. In Chile and Spain, however, there is little to no difference in the use of this strategy compared to showing appreciation to children who are behaving well. Colombia is the only system where helping children understand the consequences when they do not follow the rules is used more frequently than showing appreciation. These differential approaches to supporting children's behaviour may reflect specific pedagogical approaches or beliefs about how children learn to self-regulate in group settings, versus a broader effort to support children's behaviour using all the available strategies.

Table 4.8. Practices to support children's behaviour in early childhood education and care

Percentage of staff who report using each practice "often" or "always" with the target group

	I explained the rules children should follow at the start of a new activity	I addressed children's disruptive behaviour by explaining why they should stop	I showed appreciation to children that behaved well during an activity	I helped children understand the consequences if they did not follow the rules	I divided materials into small groupings to avoid conflict between children when they accessed them	I redirected a child to an appropriate activity if they were disturbing other children
Pre-primary settings (ISCED level 02)						
Chile	94	94	90	91	86	82
Colombia	88	80	83	91	78	66
Denmark	86	83	78	70	42	60
Finland	85	87	90	80	53	67
Flemish Community (Belgium)	94	87	96	79	51	59
Germany*	77	79	78	71	46	56
Ireland*	85	76	88	67	76	66
Israel	86	85	94	84	77	82
Japan	77	75	88	77	58	66
Morocco	94	74	93	79	82	70
Norway*	74	88	83	75	54	53
Spain	96	90	94	93	77	88
Sweden	86	80	80	72	50	54
Türkiye	95	80	95	90	80	82
<i>New Zealand**</i>	76	78	92	72	57	76
Settings for children under age 3						
Flemish Community (Belgium)*	60	67	86	50	53	58
Germany	67	75	77	62	48	52
Ireland*	86	81	92	73	82	73
Israel	77	78	92	74	79	78
New Brunswick (Canada)*	78	83	93	75	77	79
Norway*	56	81	80	66	54	51
Quebec (Canada)*	85	89	94	81	76	72
<i>New Zealand**</i>	79	84	91	77	70	80

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to support children's behaviour within countries and subnational entities. Within each country or subnational entity, the most frequently reported practices for supporting children's behaviour are indicated in darker shades. The least frequently reported practices are indicated in white. Practices for which intermediate percentages of staff reported using the practice "often" or "always" are indicated by intermediate shades. Grey indicates low survey coverage.

The "target group" refers to the group of children with whom staff worked the most on their last working day before the survey.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.4.12.StatLink  <https://stat.link/liumok>

When confronted with concrete scenarios, at both levels of ECEC, most staff say they would adjust their activity or plans to respond to children's needs or interests

To better understand how ECEC staff may adapt their practices in response to children's initiatives, they were given two concrete scenarios they might encounter when working with children in their setting and asked how likely they would be to use each of four different response strategies (Box 4.2). The discussion in this section focuses on the share of staff who said they would "probably do" or "definitely do" each option (Tables Staff.21 and Staff.22).

Scenario 1 describes a situation where, while the staff member reads a book with a group of children, a child stands up to say she can make a noise like the animal in the story. In all systems, staff are least likely to respond to this scenario with strategy 3, which asks the child to sit down and reminds the children to listen quietly (Table Staff.21). At the same time, there is much variation between systems in the consistency of this choice among staff. In Chile, Colombia, Israel, Japan, Morocco, Spain and Türkiye, a broadly similar share of staff say they would use this approach as that which say they would not. Staff most consistently say they would not choose this option in pre-primary settings in the Flemish Community of Belgium, both levels of ECEC in Germany and in settings for children under age 3 in Quebec (Canada).

The remaining options (1, 2 and 4) each acknowledge the child's engagement with the story in different ways. Strategy 1 proposes pausing the reading activity to positively engage with the child's interjection. Strategies 2 and 4 both continue the reading activity, suggesting they see what else the animal does in the story or pretend to be animals once it is finished, respectively. While strategy 2 tends to be the most popular choice overall, in many systems there is relatively little difference in the share of staff who say they would use each one. Notable exceptions include pre-primary settings in Japan, where strategy 1 is a less popular choice than both 2 and 4, while the opposite is seen in pre-primary settings in the Flemish Community of Belgium. In both levels of ECEC in Germany, strategy 4 is less popular than strategies 1 and 2.

Scenario 2 describes a shy child who enthusiastically shows the staff member a book on a topic different from that planned for the day, which he wants to share with the group. Strategy 4, which suggests reading the book later that day even though this does not fit with the plans, is often the most popular choice, with over 85% of staff saying they would do this in all systems (Table Staff.22). These responses highlight high levels of ECEC staff sensitivity and regard for children's perspectives, key components of good quality, across the ECEC sector in participating countries and subnational entities. In all systems, a higher share of staff say they would use strategy 4 compared to strategies 1 and 3, which involve having the child put the book somewhere safe so it is not lost and suggesting to read it tomorrow, respectively. In most systems, strategy 4 is also more popular than strategy 2, which suggests reading the book the same day during a free-play activity. However, in pre-primary settings in Finland, Japan, Morocco and Türkiye and at both levels of ECEC in Germany, a similarly high share of staff say they would respond in this way compared to strategy 4.

Box 4.2. What do you do? Scenarios and possible response strategies presented to staff

Staff were presented with two concrete scenarios they might encounter while interacting with children in their work and asked how likely they would be to respond to each with four different response strategies. As this choice could depend on factors not covered in the scenarios, staff could say they would (or would not) do multiple strategies. Table 4.9 provides the full text of the scenarios and response strategies. These questions were not administered in pre-primary settings in Denmark, Norway and Sweden nor in settings for children under age 3 in the Flemish Community of Belgium, Israel and Norway.

The two scenarios and accompanying response strategies are adapted from the Classroom Assessment Scoring System (CLASS) (Pianta, La Paro and Hamre, 2008^[20]). Given the complexity of situations encountered by early childhood education and care (ECEC) staff, these scenarios and responses are intended to provide insight into staff beliefs and attitudes, complementing more traditional survey items and drawing on specific dimensions of the CLASS framework. Key CLASS dimensions reflected in these items include: sensitivity, regard for child perspective, behaviour management, concept development, quality of feedback and language modelling. Differences across ECEC systems in staff endorsement of the various strategies can reflect the relative weight placed on these different CLASS dimensions as well as differences in curricular and socialisation goals.

Table 4.9. Scenarios and possible response strategies of how ECEC staff may adapt their practices in response to children's initiatives

	Scenario 1	Scenario 2
Scenario	You are reading a book to a small group of children. One child stands up and announces that she can make a noise just like the animal in the book. What do you do?	There is a child in your group who usually seems shy, does not speak much and is reluctant to engage in group activities. One morning the child enthusiastically shows you a book on outer space, and he seems eager to share it with the group. Your plan for the group today was to finish a multiday series of activities on animals. What do you do?
Response strategies	1) I ask her to show us and suggest other children join in with making animal sounds. 2) I acknowledge her excitement and say "Let's continue reading to see what else the animal in the book does". 3) I ask her to sit down and remind everyone that it is important to listen quietly when we read books together. 4) I acknowledge her engagement with the book and tell her we can pretend to be animals after we finish the story.	1) I have the child put the book in a safe place so it does not get misplaced. 2) I say "Nice, this is about outer space! Can we look at it together during our free-play activity time later today?". 3) I suggest that tomorrow we can ask the group if they would like to read this book together. 4) I offer to read the book to the group during story time even though it does not fit with the plans for the day.

Supporting rich interactions and experiences in early childhood education and care settings

As discussed earlier, the practices staff use to support children's development vary across and within systems. A key question is to better understand factors that shape these practices and can be affected by policies. To shed light on this question, this section discusses how the share of staff time spent on different tasks – preparing activities, documenting children's development and collaborating with parents – as well as staff and setting characteristics, are associated with the use of these various practices. To synthesise the full range of practices staff use with children covered by the survey, items within each domain (social,

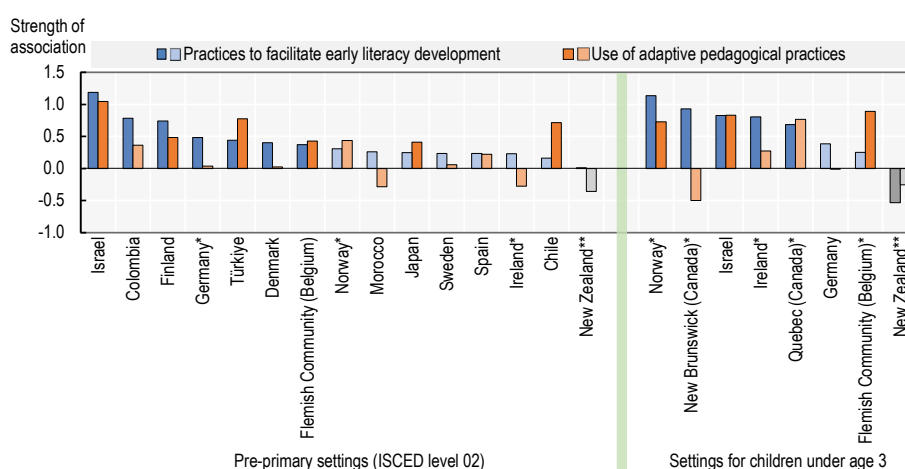
emotional, language, play and exploration, child-centred approaches, literacy, numeracy, adaptive practices, and behaviour supports) are combined into a single indicator (or scale, see Annex C) for each of these nine domains of practices (Tables D.4.13, D.4.14, D.4.15, D.4.16, D.4.17, D.4.18, D.4.19, D.4.20 and D.4.21).

Spending a greater share of time documenting children's development is often associated with greater use of practices, particularly those to support early literacy development and adaptive pedagogical practices

Among tasks on which staff can spend their time considered in this analysis (preparing activities alone, preparing activities with colleagues, documenting children's development, and collaborating or speaking with parents), spending a greater share of time documenting children's development is most often associated with greater use of different practices, as measured by the scales for each of the nine domains. This positive association with time documenting children's development is seen in at least five systems in each of the nine domains of practices, but most commonly for early literacy development and adaptive pedagogical practices (Figure 4.3). Across all nine domains of practices, these positive associations are most consistently seen in pre-primary settings in Finland, the Flemish Community of Belgium and Israel, while spending more time documenting children's development is neither positively nor negatively associated with any domains in pre-primary settings in Ireland and Sweden.

Figure 4.3. Association between staff time spent documenting children's development, well-being and learning and practices with children

Change in the scales of staff practices to facilitate early literacy development and use of adaptive pedagogical practices associated with being in the top tertile of time spent documenting children's development, well-being and learning



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Results show unstandardised coefficients from two multivariable linear regression models for staff in the top tertile within their country or subnational entity of time spent on documenting children's development, well-being and learning compared to staff in the bottom tertile of time spent on this activity linked with: 1) the scale of practices to facilitate early literacy development; and 2) the scale of adaptive pedagogical practices. Statistically significant results are indicated in a darker colour, except for New Zealand. For more information, see Annex C.

Countries and subnational entities are ranked in descending order of the strength of the association between spending a greater proportion of time documenting children's development, well-being and learning and practices to facilitate early literacy development.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Tables D.4.17 and D.4.20.

StatLink  <https://stat.link/05jkrm>

Spending a greater share of time on planning and preparing learning activities is also associated with greater use of certain practices in some systems. Overall, planning and preparing learning activities with colleagues is more often associated with greater use of practices than doing so alone, but this varies across systems and domains of practices. In pre-primary systems in Denmark, the Flemish Community of Belgium, Germany and Spain and settings for children under age 3 in Israel, planning and preparing with colleagues is exclusively or more commonly associated with a greater use of practices than doing so alone, while the opposite is seen in Japan and settings for children under age 3 in the Flemish Community of Belgium. In pre-primary settings in Norway, this varies across practices. On the other hand, spending a greater share of time on planning is associated with less frequent use of practices for one or two systems for each domain, highlighting that other factors (e.g. how this time is spent and whether sufficient time remains for other tasks) also matter.

Speaking or collaborating with parents is also associated with a greater use of practices in some systems. This is most common in Japan, where such positive associations are seen for almost all domains of practices, and for at least four domains of practices in pre-primary settings in Sweden and Türkiye and in settings for children under age 3 in Norway.

Greater staff experience is associated with more or less use of certain practices to support children's development

The number of years staff have spent working in ECEC settings is associated with their use of practices to support children's development in many systems. However, the direction of this relationship often varies across practices and systems. These differences may reflect variation in education and training over time, as well as what staff have learnt while working in ECEC settings.

Overall, having less than ten years of experience working in ECEC tends to be associated with greater use of behaviour support and language development practices, yet less use of practices to support early literacy, numeracy and emotional development. The direction of relationships between staff experience and use of practices is often consistent within systems. In Japan, having less than ten years of experience is associated with greater use of most practices. In other systems, notably pre-primary settings in Colombia, Denmark, Ireland and New Zealand**, more experience tends to be associated with more use of such practices. Ongoing professional development, whether it is to foster the use of more of such practices among staff with more experience or to have these staff share their expertise with their less experienced colleagues, has a key role to play in ensuring staff are supporting children across developmental domains throughout their careers (see Chapter 6).

Staff in a leader or teacher role report greater use of all practices compared to those in other roles in several systems, except around supporting children's behaviour

ECEC staff who describe their role in the ECEC setting as a leader or teacher often report using more practices to support children's development than staff who identify in other roles, including as an assistant or a member of staff responsible for specific children. This is particularly common in pre-primary settings in Chile, Colombia, the Flemish Community of Belgium, Spain and Türkiye, where being a leader or teacher is associated with greater use of at least four domains of practices. Notably, the use of adaptive pedagogical practices and practices to support children's behaviour have the fewest associations with having a leader or teacher role. This variation may reflect differences in training provided to staff within different roles, as well as differences in the responsibilities associated with their roles.

Larger target group sizes are associated with greater use of practices to support children's early language development and behaviour in some systems

The extent to which ECEC staff report using different practices is associated with the size of the setting, or the size of the target group, in several systems. Working with a larger target group is associated with the use of more practices to support early language development in pre-primary settings in Germany, Morocco, New Zealand** and Sweden and in settings for children under age 3 in Germany, Ireland, Israel and Norway. It is also associated with more use of practices to support children's behaviour in pre-primary settings in Germany, Japan, Morocco, New Zealand** and Sweden and in settings for children under age 3 in Germany, Ireland and Norway. Working with larger groups of children may provide staff with more opportunities to use these practices, with more varied opportunities for supporting language development and a greater need to support behaviours that are consistent with group expectations. Notably, this association exists even when accounting for the number of staff per children in the target group, which is itself favourably associated with supports for children's language and behaviour in some systems, although less consistently than group size.

Policy pointers

- **Support staff to effectively balance their time between working directly with children and dedicating time to necessary tasks that support process quality.** In many systems, spending more time on tasks such as documenting children's development and planning activities is associated with a greater use of practices to support children's development, suggesting that dedicating time to these activities can have a positive impact on staff practice. At the same time, staff working long hours often spend a greater share of their work time on planning, indicating that such tasks can contribute to long working hours if they are excessive. Strategies such as providing dedicated time and encouraging collaboration among staff in planning can support staff to balance their time effectively.
- **Support staff to intentionally use effective practices that support all domains of children's development.** Across domains of practices, some areas receive more focus than others. Practices to support social and emotional development are typically the most common practices, with those that support early literacy and numeracy development, particularly numeracy, the least common. In addition, across all domains, practices that promote children's agency and more intentionally focus on skill development tend to be less frequently used. Removing barriers to the implementation of intentional practices, which may require more staff time or are more complicated to prepare and/or implement, or providing training for staff on implementing these types of practices, can support staff to use effective practices that target all areas of development.
- **Provide training opportunities for new and established staff that support them to offer children rich interactions and experiences.** In many systems, the length of time staff have spent working in ECEC settings is associated with their use of practices to support children's development. However, whether the use of these practices is more common among new or more established staff varies across practices and systems. Education and training opportunities should be available to staff of all levels of experience, ensuring that more experienced staff remain up to date with the latest research and best practices while newer staff can build the knowledge and skills needed to develop quickly into their roles as early childhood professionals.

References

- Blases, D. et al. (2021), "Implementing toddler interventions at scale: The case of "We learn together"", *Early Childhood Research Quarterly*, Vol. 57, pp. 12-26, <https://doi.org/10.1016/j.ecresq.2021.04.008>. [2]
- Denham, S. and K. Zinsler (2014), "Social and emotional learning during early childhood", in *Encyclopedia of Primary Prevention and Health Promotion*, Springer US, Boston, MA, https://doi.org/10.1007/978-1-4614-5999-6_144. [13]
- Duncan, G. et al. (2023), "Investing in early childhood development in preschool and at home", *Handbook of the Economics of Education*, Vol. 6, pp. 1-91, <https://doi.org/10.1016/bs.hesedu.2022.11.005>. [3]
- Harrington, E. et al. (2020), "Emotion regulation in early childhood: Implications for socioemotional and academic components of school readiness", *Emotion*, Vol. 20/1, pp. 48-53, <https://doi.org/10.1037/emo0000667>. [16]
- Hirsh-Pasek, K. et al. (2008), *A Mandate for Playful Learning in Preschool*, Oxford University Press, <https://doi.org/10.1093/acprof:oso/9780195382716.001.0001>. [11]
- Jenkins, J. et al. (2018), "Boosting school readiness: Should preschool teachers target skills or the whole child?", *Economics of Education Review*, Vol. 65, pp. 107-125, <https://doi.org/10.1016/j.econedurev.2018.05.001>. [4]
- Kähkönen, K. et al. (2018), "Sensory-based food education in early childhood education and care, willingness to choose and eat fruit and vegetables, and the moderating role of maternal education and food neophobia", *Public Health Nutrition*, Vol. 21/13, pp. 2443-2453, <https://doi.org/10.1017/s1368980018001106>. [6]
- Norwegian Directorate for Education and Training (2017), *Framework Plan for Kindergartens*, <https://www.udir.no/contentassets/7c4387bb50314f33b828789ed767329e/framework-plan-for-kindergartens--rammeplan-engelsk-pdf.pdf> (accessed on 19 November 2025). [8]
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>. [18]
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>. [12]
- OECD (2025), *TALIS Starting Strong 2024 Conceptual Framework*, OECD Publishing, Paris, <https://doi.org/10.1787/f49228be-en>. [19]
- OECD (2024), *Social and Emotional Skills for Better Lives: Findings from the OECD Survey on Social and Emotional Skills 2023*, OECD Publishing, Paris, <https://doi.org/10.1787/35ca7b7c-en>. [15]
- OECD (2021), *Starting Strong VI: Supporting Meaningful Interactions in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/f47a06ae-en>. [7]

- OECD (2020), *Building a High-Quality Early Childhood Education and Care Workforce: Further Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/b90bba3d-en>. [9]
- OECD (2018), *Engaging Young Children: Lessons from Research about Quality in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/9789264085145-en>. [1]
- Pianta, R., K. La Paro and B. Hamre (2008), *Classroom Assessment Scoring System (CLASS) Manual, Pre-K*, Teachstone. [20]
- Rege, M. et al. (2024), "The effects of a structured curriculum on preschool effectiveness: A field experiment", *Journal of Human Resources*, Vol. 59/2, pp. 576-603, <https://doi.org/10.3368/jhr.0220-10749R3>. [5]
- Strehmel, P. and S. Viernickel (2022), *Bundesweite Standards zur Betreuungsrelation in der Kindertagesbetreuung: Expertise im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend*, Bundesministerium für Familie, Senioren, Frauen und Jugend, https://www.fruehe-chancen.de/fileadmin/user_upload/PDF-Dateien/AG_Fr%C3%BChe_Bildung_Bericht/Expertise_Betreuungsrelation_Strehmel_Viernickel_2023_BF.pdf (accessed on 6 November 2025). [10]
- Thümmeler, R., E. Engel and J. Bartz (2022), "Strengthening emotional development and emotion regulation in childhood: As a key task in early childhood education", *International Journal of Environmental Research and Public Health*, Vol. 19/7, p. 3978, <https://doi.org/10.3390/ijerph19073978>. [17]
- Zins, J. et al. (2007), "The scientific base linking social and emotional learning to school success", *Journal of Educational and Psychological Consultation*, Vol. 17/2-3, pp. 191-210, <https://doi.org/10.1080/10474410701413145>. [14]

5

Building awareness and acceptance of diversity in early childhood education and care settings through staff practices and engagement with families

This chapter looks at the practices in place in early childhood education and care (ECEC) settings to build awareness and acceptance of diversity among children as well as strategies to communicate and engage with families. In the context of growing ECEC participation and increasing diversity among children, the chapter highlights ECEC staff and setting capacity to work with children whose home language is different from the main language(s) used at the ECEC setting. The chapter considers practices related to diversity, family engagement and staff perceptions of priorities for increased spending in the ECEC sector in the context of the concentration of children with diverse characteristics in the ECEC setting.

Key findings

- **In settings with more practices to promote awareness and acceptance of diversity, staff also report more use of child-centred and adaptive pedagogical practices.** Greater efforts to promote diversity in ECEC can contribute to fostering high-quality practices, regardless of the backgrounds of the children in the settings. In most ECEC systems, staff practices to promote diversity are not associated with the characteristics of the children in the setting in terms of language, socio-economic background or special education needs.
- **Greater agreement among staff that practices to promote awareness and acceptance of diversity are used in their ECEC settings is associated with their self-efficacy in this area and with leaders reporting more policies and practices in this area.** Staff who feel more capable of helping children develop their interest in differences and commonalities can facilitate stronger institutional cultures of practices around support for diversity. Setting-level practices can further reinforce staff practices.
- **In most systems, books and other materials in the setting represent people from a variety of ethnic and cultural groups more often than they do other aspects of diversity.** While representations of diversity in different materials are common, staff in many systems report less representation of people with different physical needs and diverse family structures than those from a variety of ethnic and cultural groups.
- **Most ECEC staff work with children whose home language is different from the language used at the ECEC setting and many staff also speak these languages.** In settings where leaders report there are parents who do not speak the main language of the setting, it is common for staff members to speak at least some, if not all, of the languages represented.
- **In some systems, staff in settings with a higher share of children from different language backgrounds support greater funding for this group.** Increased spending to support children with different language backgrounds is generally a lower priority than investments to support children from disadvantaged backgrounds or those with special education needs.
- **Overall, communication with parents is common across systems, particularly informing them about daily activities in the setting.** Practices that require more time and more involvement from parents, such as participating in setting-level decision making, are less common in most, but not all, systems.
- **Staff perspectives on family engagement in the setting are not systematically linked with the prevalence of vulnerable children in the setting.** The concentration of children whose home language is different from the main language(s) used at the ECEC setting, who come from socio-economically disadvantaged homes or who have special education needs is not generally associated with staff reports of the use of family engagement practices in their settings.

Disparities in children's experiences in their early years can lead to enduring inequalities in key life outcomes. A child's social, cultural or economic background can limit their access to environments that support their development and well-being (OECD, 2025^[1]). Access to high-quality ECEC has the potential to bridge gaps in children's opportunities at a time when their development is particularly sensitive to intervention, and these benefits can extend throughout their lives (Leseman and Slot, 2025^[2]). At the same time, children's experiences in ECEC settings can deepen inequalities when some children are less likely to participate in ECEC or it is of a poorer quality (González-Sancho et al., 2023^[3]).

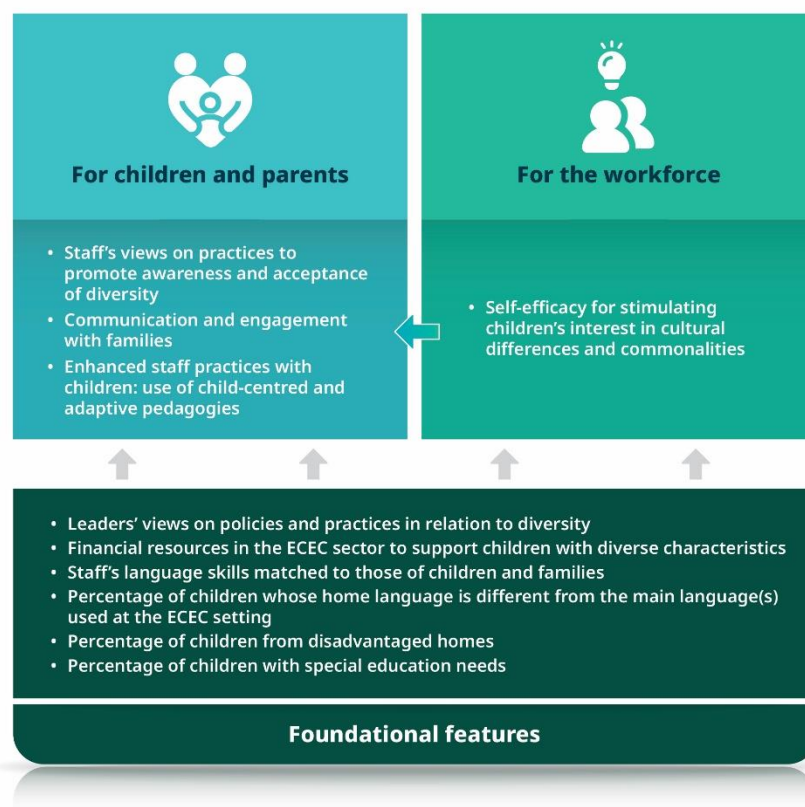
Many ECEC systems have successfully increased and broadened participation in recent decades. Although increases in ECEC participation often fail to reach the most vulnerable children, more widespread

access to ECEC nonetheless means more children from socio-economically disadvantaged backgrounds and migrant families or other minoritised groups are enrolled in ECEC settings. These shifts, alongside societal changes such as increased migration, have led to increased diversity among children participating in ECEC (OECD, 2025^[1]). With this greater diversity, ECEC staff need to respond to a wider range of expectations, strengths and needs among children and their families. Strong ECEC systems ensure all children have the opportunity to experience high-quality ECEC that is responsive to their individual needs (Leseman and Slot, 2025^[2]).

This chapter focuses on policies and practices that help all children and their families feel welcome and included in ECEC settings:

- How do ECEC settings promote awareness and acceptance of diversity among children?
- How do ECEC settings support children and families from linguistically diverse backgrounds?
- How do policies and practices related to promoting awareness and acceptance of diversity differ according to the profiles of the children in the setting and staff self-efficacy in this domain?
- How do ECEC settings engage with parents and guardians? Do practices to engage with families differ according to the profiles of the children in the setting?

Figure 5.1. Analytical framework for building awareness and acceptance of diversity in early childhood education and care settings through staff practices and engagement with families



Building awareness and acceptance of diversity in early childhood education and care

Promoting awareness and acceptance of diversity in ECEC settings can help all children and their families feel welcome and included, enabling more children to benefit from high-quality ECEC. Even when ECEC settings appear to be relatively homogenous in terms of the family and child backgrounds represented, developing young children's openness to differences through opportunities to learn about various forms of diversity (e.g. languages, physical abilities) can be an important foundation on which to build more inclusive societies in the future. Young people who demonstrate greater openness to different perspectives, values and forms of diversity are less likely to engage in bullying, more likely to reject stereotypes, and have better relationships with their teachers and peers (OECD, 2024^[4]).

The Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024 collected information from staff on the extent to which various practices to promote awareness and acceptance of diversity characterise daily interactions with children at their ECEC settings. These included having materials, such as books and pictures, that show aspects of diversity (e.g. people from different ethnic and cultural groups, people with different physical needs) as well as using activities to raise awareness of differences and commonalities and opportunities to play with toys and artefacts from other cultures. This section looks at these reports to understand the different forms of diversity reflected in materials and practices across countries and subnational entities. Within countries and subnational entities, differences are considered in relation to the different characteristics of the children in the ECEC settings, focusing on children whose home language is different from the language used at the ECEC setting, children from socio-economically disadvantaged homes and children with special education needs. In addition, the section considers staff reports of their self-efficacy to stimulate children's interest in cultural differences and commonalities (i.e. how much they feel they can do this), as well as their beliefs about how important it is to develop children's citizenship, tolerance and openness to other cultures to prepare children for the future.

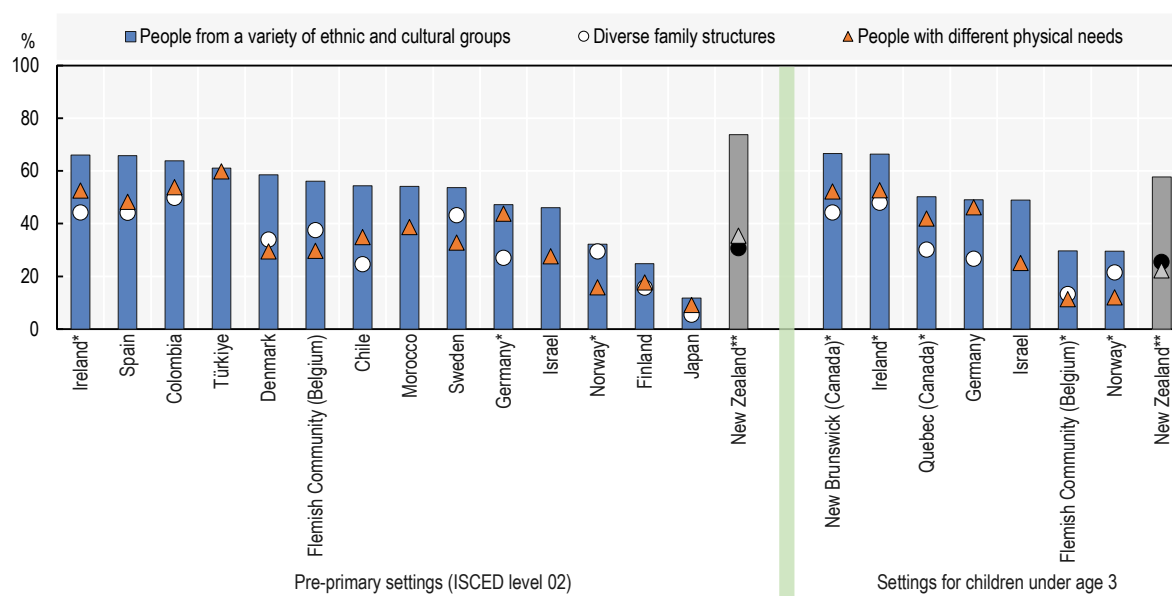
Books and pictures in settings more often represent people from a variety of ethnic and cultural groups than people with different physical needs or family structures

There is wide variation across countries and subnational entities in the extent to which staff agree various practices to promote awareness and acceptance of diversity characterise practices in their settings. Nonetheless, having books and pictures is generally among the most common practices to promote awareness and acceptance of diversity, compared with the use of specific activities (i.e. activities that emphasise what people from different ethnic and cultural groups have in common or that aim to raise awareness about the different languages of the children in the group) or opportunities to play with toys and artefacts from cultures other than the ethnic majority (Table D.5.1). Exceptions to this pattern are in pre-primary settings in Finland and Morocco, where activities are used more, and in Japan, where activities and playing with toys and artefacts from cultures other than the ethnic majority are used more.

Notably, staff in all systems report that books and pictures in the setting less often represent people with different physical needs or with diverse family structures than people from a variety of ethnic and cultural groups, although the differences are small in some cases (Figure 5.2). Including people from diverse backgrounds in books and other materials allows more children to see themselves and their families reflected in their surroundings. Such representations also offer all children a window into experiences beyond their own, helping them to develop skills such as tolerance and openness to different perspectives (OECD, 2023^[5]).

Figure 5.2. Representation of diversity in books and pictures in early childhood education and care settings

Percentage of staff who agree “quite a bit” or “a lot” that the following groups are represented in books and pictures at their ECEC setting



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: Data are not available from Israel, Morocco and Türkiye on the representation of diverse family structures in books and pictures in ECEC settings.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the percentages of staff reporting that the ECEC setting has books and pictures showing people from a variety of ethnic and cultural groups.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.5.1.

StatLink  <https://stat.link/wehqy4>

More staff-reported use of practices to promote awareness and acceptance of diversity is associated with self-efficacy in this area and leader-reported diversity policies and practices

When the different practices to promote awareness and acceptance of diversity are combined to paint an overall picture of staff perceptions of their settings' efforts in this area, there is a positive association with staff self-efficacy around stimulating children's interest in cultural differences and commonalities (Figure 5.3). Feeling more capable of helping children develop their interest in differences and commonalities may enable staff to use such practices more regularly. At the same time, a stronger sense of self-efficacy in this area may follow from regular use of practices that value diversity.

Setting-level policies and practices in this area, as reported by leaders, also support staff reports of more practices around diversity in their settings in some contexts. This is the case in pre-primary settings in several countries (Chile, Japan, Morocco and Spain), although the strength of association is not as strong as for self-efficacy (Table D.5.2). This finding highlights the potential for leaders to contribute to a setting-level culture around diversity practices, reinforcing staff self-efficacy in this area. In contrast, staff in Quebec (Canada) report less use of diversity practices in their settings when leaders report more policies

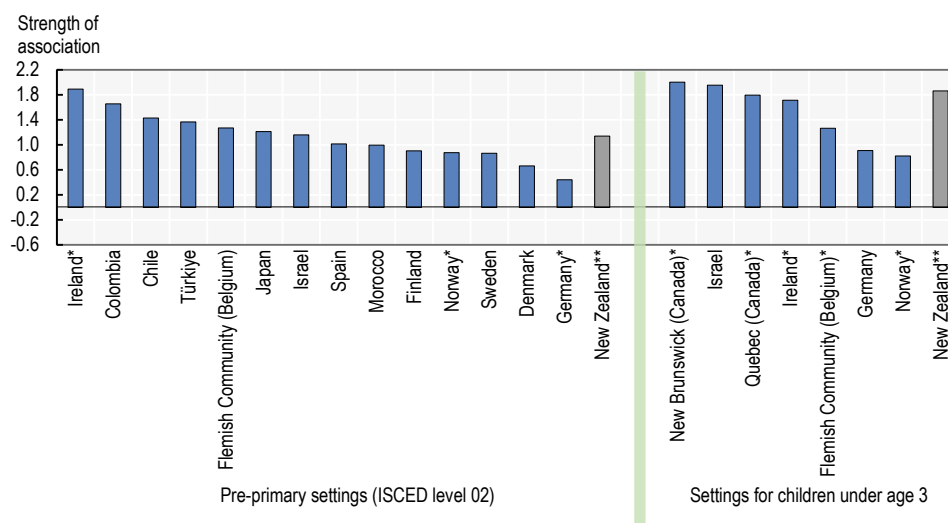
and practices in this area, suggesting a mismatch between leaders' intentions and staff perceptions of on-the-ground implementation.

In addition, staff views that developing children's citizenship, tolerance and openness to other cultures are of high importance are associated with greater use of practices to promote awareness of acceptance and diversity in pre-primary settings in Israel, Japan and Türkiye, although the opposite is true in pre-primary settings in Norway. This contradictory finding may indicate that pre-primary staff in Norway who place a particularly high value on diversity practices feel that their ECEC settings could do more to promote awareness and acceptance of diversity among children.

Additional setting-level characteristics associated with staff perceptions of their settings' diversity practices are likewise mixed. For instance, in pre-primary settings in the Flemish Community of Belgium and Spain as well as in settings for children under age 3 in Israel, staff in publicly managed settings report more use of practices related to diversity, whereas staff in private settings report this more often in pre-primary settings in Germany and Morocco.

Figure 5.3. Association between staff self-efficacy and practices to promote awareness and acceptance of diversity in early childhood education and care settings

Change in the scale of practices to promote awareness and acceptance of diversity associated with strong self-efficacy to stimulate children's interest in cultural differences and commonalities



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Results show unstandardised coefficients from a multivariable linear regression model of the scale of practices to promote awareness and acceptance of diversity (reported by staff) on staff self-efficacy to stimulate children's interest in cultural differences and commonalities. All coefficients are statistically significant. For more information, see Annex C.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the strength of the association between staff reports of practices to promote awareness and acceptance of diversity and their self-efficacy in stimulating children's interest in cultural differences and commonalities.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.5.2.

Diversity practices in ECEC settings do not differ based on the characteristics of the children in the setting, but do align with stronger staff pedagogical practices with children

There are a few ECEC systems where staff reports of the diversity practices in their settings are associated with the composition of the children in the setting in terms of the concentration of children who have a different home language, those from disadvantaged homes or those with special education needs; however, there are no systematic differences across countries and subnational entities related to one of these specific dimensions of diversity (Table D.5.2). Having higher shares of children with these different characteristics can highlight the importance of fostering awareness and acceptance of diversity among children, but such practices are still relevant in more homogenous peer groups. Exposure to and awareness of different dimensions of diversity can better equip young children with the values and skills to understand different perspectives. Moreover, when aspects of diversity are present in the group of children but not visible to children or staff, staff practices that value diversity can make children and families feel more welcome. Thus, it is important to continue fostering the use of these practices in ECEC systems across settings regardless of the children they serve.

On this point, staff who report greater use of practices to promote awareness and acceptance of diversity in their settings also report that they used more child-centred approaches to structuring and facilitating learning in their work in the week prior to the survey in pre-primary settings in nearly all countries and subnational entities (with the exception of Germany and Norway), as well as in settings for children under age 3 in Germany and Israel (Table D.5.3). Likewise, in the same countries and subnational entities, greater use of diversity practices in the setting is associated with greater use by staff of adaptive pedagogical practices in the group of children they work with the most (Table D.5.4). These practices with children reflect strong staff capacity to respond to individual children's needs and interests, and a regard for children's perspectives that is often associated with higher levels of quality in ECEC settings (Pianta, La Paro and Hamre, 2008^[6]). Thus, more use of practices to promote awareness and appreciation of diversity in ECEC settings may encourage staff to use more high-quality practices with children in their daily work. The opposite may also be true, with staff who use more of these high-quality practices in their own work with children creating a stronger setting-level culture around promoting awareness and acceptance of diversity.

Responding to growing linguistic diversity in early childhood education and care

There is an increasing share of children in ECEC whose home language is different from that used in the setting (OECD, 2025^[1]). This growing linguistic diversity means that children have a broader range of experiences at home, including variation in their early exposure to the primary language used in their ECEC settings. Despite the individual benefits that can be associated with multilingualism (Espinosa, 2020^[7]; Yurtsever, Anderson and Grundy, 2023^[8]), ECEC staff working with multiple language learners must respond to different emerging language strengths and needs. In addition, when families speak different languages than ECEC staff, this can also pose challenges for effectively communicating and engaging with them.

TALIS Starting Strong 2024 asks staff and leaders about linguistic diversity in their ECEC settings. Staff indicate whether they speak any of the languages spoken by children whose home language(s) is (or are) different from the main language(s) used in the ECEC setting. Leaders also indicate whether there are staff in their setting who speak the language of parents or guardians who do not speak the main language(s) used at the ECEC setting, in addition to reporting the number of children in the setting who have a different home language. In addition, staff were asked how much importance they would place on 11 different spending priorities, including support for children with a different home language, children from disadvantaged backgrounds and children with special education needs, if budgets for the sector were to

be increased by 5%. Staff also reported on their practices to raise awareness of different home languages used by children in the ECEC setting.

A majority of ECEC staff work with children whose home language is different than that of the ECEC setting and many staff also speak these languages

In all countries and subnational entities, a majority of ECEC staff report working with children whose home language is different from the main language used in the ECEC setting (Table Staff.4). This is particularly common in pre-primary settings in Denmark, Finland, the Flemish Community of Belgium and Sweden; in settings for children under age 3 in New Brunswick (Canada); and at both levels of ECEC in Germany, New Zealand** and Norway. These are countries and subnational entities that have officially multilingual contexts and/or high rates of ECEC participation, making it more likely that linguistically diverse children, including those who use sign language, are included in ECEC settings (OECD, 2025^[1]).

Leader reports of parents who speak the language of the setting are generally aligned with staff reports of children who speak another language at home, underscoring the prevalence of different language backgrounds among families in ECEC settings (Table Leader.16). In only a few of the participating ECEC systems (pre-primary settings in Chile, Colombia and Japan and settings at both levels of ECEC in Israel) do a majority of ECEC setting leaders indicate that all parents or guardians speak the main language used at the ECEC setting. Taken with the information that a majority of staff in all systems work with children who speak a different language at home, this information from leaders suggests that some families may use another language at home but are also able to use the main language of the ECEC setting for exchanges with staff and other families.

In settings where leaders report that there are parents who do not speak the main language of the setting, it is common for the leaders to also indicate that members of their staff speak at least some, if not all, of the languages represented (Table Leader.16). This is even more common in settings that are more linguistically diverse; that is, where 10% or more of the children in the setting have a different home language, compared to settings where there are fewer children with a different home language (Table D.5.5). Likewise, staff are more likely to report they speak the home language of at least some children in the setting when they work in more linguistically diverse settings in pre-primary settings in Finland, Morocco and Norway; in settings for children under age 3 in Israel and Quebec (Canada); and at both levels of ECEC in the Flemish Community of Belgium, Germany and Ireland (Table D.5.6).

These findings from both leaders and staff highlight the challenges of matching staff's linguistic skills to those of children and families within ECEC settings, which is not always possible to do when many languages are represented or when there is a small number of children and families who speak a language different from the main language of the ECEC setting. A majority of leaders in most pre-primary systems and in half of the systems for children under age 3 report that they make efforts to employ ECEC staff that are representative of the diverse backgrounds of the children and families served (Table D.5.7), likely contributing to the multilingual profiles of staff in settings where a higher share of children have a different home language.

Among countries where the workforce comprises a mix of teachers and assistants (see Chapter 2), there are some differences in the shares of teachers and assistants who report speaking any of the home languages spoken by children in their settings: in pre-primary settings in Denmark and Sweden, assistants are slightly more likely to speak the children's home languages, whereas in pre-primary settings in Chile, teachers more often indicate they speak these other languages (Table D.5.8). These differences tend to be small and likely reflect different national priorities around staff recruitment and education. For example, some countries may try to recruit more staff with language profiles similar to those of the children in the ECEC setting into the assistant role, as this pathway can require less specific education and training (see Chapter 2). In other contexts, it may be that more educated staff, who are more often teachers, are also more likely to have knowledge of additional languages.

Staff in several systems favour more spending to support children who speak another language at home when they work in settings with a higher concentration of these children

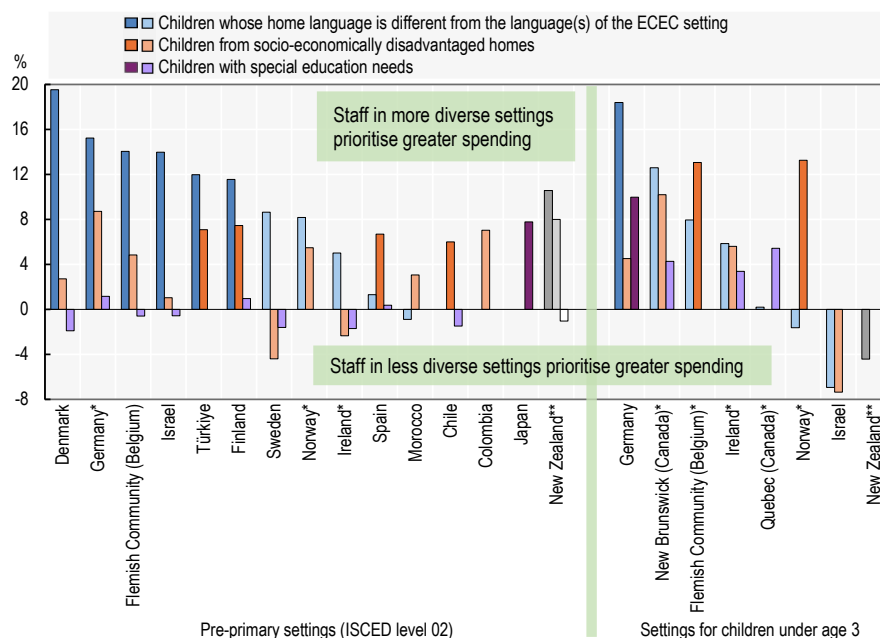
When comparing settings with higher and lower shares of children whose home language is different from the main language(s) used at the ECEC setting (10% or more of children versus fewer), staff working in settings with higher shares of these children in pre-primary settings in Denmark, Finland, the Flemish Community of Belgium, Israel and Türkiye and at both levels of ECEC in Germany are more likely to indicate it is of “somewhat high” or “very high” importance to increase spending in the sector on support for children whose home languages are different than that of the setting (Figure 5.4).

There are fewer and smaller differences among staff placing a high importance on spending to support children from disadvantaged backgrounds and those with special education needs related to the share of children with these characteristics in settings. This is likely related to the fact that increased spending to support these two groups is widely viewed as important across countries and subnational entities, more so than for children whose home language is different (Table D.1.2). Investing in supporting children with special education needs stands out, in particular, among staff priorities for additional investments in the ECEC sector: across pre-primary systems, it is the most consistently endorsed area for additional funding across all countries and subnational entities and one of the top 3 priorities for staff in 13 pre-primary systems and 6 systems for settings for children under age 3. The only other area for additional funding with a similar level of priority across all countries and subnational entities is improving ECEC staff salaries, underscoring the high level of importance ECEC staff assign to increasing support for children with special education needs.

Staff who work more regularly with children who have a different home language can be more attuned to their needs and how additional spending could be used to support them. This is reflected in the greater use of activities to raise awareness about the different languages of the children in the group among staff working in settings with 10% or more of children who speak another language at home, compared to their colleagues in settings with fewer children with different home languages, in most countries and subnational entities (Table D.5.12). At the same time, staff who work with more children with different language backgrounds may feel under-resourced to sufficiently support these children, therefore identifying investments in this area as being of greater importance.

Figure 5.4. Staff spending priorities in the early childhood education and care sector

Difference in staff spending priorities to support children with different characteristics if the budget for the ECEC sector were to be increased by 5% among staff who work in settings with 10% or more of children with the respective characteristic versus in settings with less than 10% of children with that characteristic



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: Staff who indicated that supporting children with the respective characteristics is of “somewhat high” or “very high” importance if the budget in the ECEC sector were increased by 5% are compared to staff who indicated it to be of “very low,” “somewhat low” or “moderate” importance.

Statistically significant differences are indicated in a darker colour, except for New Zealand.

The figure only shows valid data. Values that are not shown were based on too few observations to ensure reliability.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the size of the difference in the importance of supporting children whose home language is different than the language of the ECEC setting between staff who work in settings with 10% or more of children whose home language is different than the language of the ECEC setting versus in settings with less than 10% of children with that characteristic.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Tables D.5.9, D.5.10 and D.5.11.

StatLink  <https://stat.link/uf6mc4>

Engaging with parents and families in early childhood education and care

All children stand to benefit from engagement between ECEC staff and families. Meaningful partnerships with parents or guardians can increase trust in services, enable ECEC staff to develop a deeper understanding of each child and the wider family context, and help parents to build on children’s ECEC experiences at home (OECD, 2024^[9]). Consequently, many systems have reflected the importance of working with families in ECEC curricula and quality frameworks (OECD, 2021^[10]) (Box 5.1). Engagement with families can also be an important tool for promoting equity, helping all children have high-quality interactions with ECEC staff, other children, toys and materials, and their communities and families, in

complementary ways in their ECEC settings and at home (Eurofound, 2025^[11]; Iruka, Cabrera and Páez, 2022^[12]).

Box 5.1. Curricular approaches and formal goals around engaging parents and guardians in early childhood education and care

The curriculum in many early childhood education and care (ECEC) systems includes co-operation between the ECEC settings and families as one of its goals. For example, the curriculum framework in Ireland, updated in 2024, highlights the importance of partnerships and collaborations, with “Family and Community” identified as one of nine underpinning principles (National Council for Curriculum and Assessment, 2024^[13]). The framework promotes a key person approach. The key person is a point of contact for the family and works in partnership with them. The *Guidelines for Good Practice*, which accompany the framework, outline how to support learning and development through partnerships with families, including the need to build and maintain trusting relationships, and making time and creating space to have meaningful conversations and interactions with parents (National Council for Curriculum and Assessment, 2009^[14]).

In the Flemish Community of Belgium, the pedagogical framework for ECEC settings for children under age 3 also highlights the central role of families (Kind & Gezin, 2014^[15]). It notes the value of ECEC for children, families and societies and frames the way ECEC providers view these different stakeholders. Three of the framework’s ten central principles focus on the way ECEC views families: 1) families are competent; 2) relationships are reciprocal; and 3) people are interconnected. In everyday practice, this vision is expressed through mutual acquaintance and relationship-building between practitioners and families as well as active participation and regular consultation with families.

Likewise, in Norway, the ECEC Framework Plan for Kindergartens has a dedicated chapter on “Co-operation between home and kindergarten” (Norwegian Directorate for Education and Training, 2017^[16]). This document states that kindergartens must facilitate co-operation and good dialogue with parents, at the individual level and through a parents’ council and the co-ordinating committee. The co-ordinating committee offers parents the opportunity to draw up an annual plan for the kindergarten and to participate in other important matters, such as budget proposals. The Norwegian Kindergarten Act bolsters these curriculum requirements by also noting the responsibility of ECEC centres to work in partnership with children’s homes (Norwegian Ministry of Education and Research, 2025^[17]).

In Türkiye, family education and engagement are also recognised as an essential component of the preschool curriculum framework. The curriculum emphasises family and community involvement activities, guided by tools designed to assess family needs, identify their priorities and evaluate the outcomes of their engagement. This approach aims to foster trust and collaboration between families and educators, positioning families as active and informed participants in supporting children’s holistic development (Republic of Türkiye Ministry of National Education, 2024^[18]).

In Japan, the National Curriculum Standards place an emphasis on the importance of broadening children’s learning through interactions with families and the local community, encouraging ECEC staff to foster opportunities for children to engage with people and places beyond the ECEC setting (OECD, 2021^[10]).

Not all ECEC systems include this type of formal focus on engagement with families, however. The curriculum for pre-primary settings in Israel, for instance, does not explicitly discuss the role of families (OECD, 2021^[10]). Nonetheless, the Ministry of Education in Israel provides guidance on supporting parents’ roles within ECEC settings.

This section focuses on how ECEC staff engage with families, including how this varies by child characteristics in settings. This section considers three main ways ECEC staff report engaging with parents and guardians in TALIS Starting Strong 2024: 1) informing them about activities taking place at the setting, their children's participation in these activities and their children's progress; 2) encouraging or guiding families in their own interactions with their children; and 3) involving families in the organisation of the ECEC setting, such as by contributing to decision making.

Keeping parents informed is common for ECEC staff and less consistent among leaders

Keeping parents or guardians informed about daily activities is a frequent practice among staff across systems and, in many, almost all staff (more than 90%) agree this takes place in their setting (Table 5.1). Using a digital platform for communication with parents is also commonplace.

Yet the frequency of communication with parents and guardians, as reported by ECEC leaders, varies considerably between and within systems (Table D.5.14). In most systems, leaders indicate that informal communication, such as having conversations about children's development or activities, is more common than formal communication, such as parent-staff meetings. Similar to staff reports, this informal communication from leaders' perspectives tends to take place regularly, on at least a monthly or weekly basis in most systems. In Denmark (in pre-primary settings) and in Ireland and New Zealand** (at both levels of ECEC), informal communication with parents and guardians is particularly common, with almost all leaders (over 95%) reporting this takes place at least monthly, while over three-quarters of leaders in these countries say it takes place at least weekly (Table Leader.33).

However, a sizeable minority of leaders report less frequent contact in some systems. Leaders reporting less frequent informal communication with families compared to staff may reflect the different roles of leaders. For instance, leaders in some contexts have more responsibility for administrative tasks, or responsibilities spread across multiple settings or levels of education, all of which can limit opportunities for regular contact with families (see Chapters 2 and 7).

Table 5.1. Practices to facilitate parent/guardian engagement in early childhood education and care settings

Percentage of staff who “agree” or “strongly agree” with the following statements as applied to their ECEC setting

Parents and guardians are:							
	Regularly informed about daily activities	Encouraged to do play and learning activities at home	Encouraged to participate in regular classroom/ playgroup activities	Encouraged to contribute to classroom/ playgroup level decisions	Encouraged to take on ECEC setting-level tasks	Given opportunities to actively participate in ECEC setting decisions	Able to communicate with staff using a digital platform
Pre-primary settings (ISCED level 02)							
Chile	91	93	92	85	83	79	95
Colombia	96	97	80	77	82	83	91
Denmark	96	73	25	40	44	70	91
Finland	96	79	47	43	35	49	96
Flemish Community (Belgium)	94	88	63	30	45	50	97
Germany*	92	68	28	35	56	68	80
Ireland*	93	77	58	54	42	66	93
Israel	88	91	87	54	81	47	86
Japan	94	59	36	27	24	58	74
Morocco	70	96	59	39	49	49	90
Norway*	98	68	20	38	42	77	98
Spain	86	96	90	48	65	69	97
Sweden	97	67	44	39	45	44	88
Türkiye	80	97	93	85	79	76	96
<i>New Zealand**</i>	94	74	64	78	44	85	97
Settings for children under age 3							
Flemish Community (Belgium)*	99	69	46	55	29	46	81
Germany	93	63	29	31	52	66	77
Ireland*	95	77	53	50	40	63	92
Israel	94	87	73	54	54	44	75
New Brunswick (Canada)*	98	75	67	63	39	67	89
Norway*	99	68	24	43	43	75	98
Quebec (Canada)*	99	84	50	42	42	66	96
<i>New Zealand**</i>	88	71	63	69	39	87	97

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to facilitate parent/guardian engagement within countries and subnational entities. Within each country or subnational entity, the most frequently endorsed practices for facilitating parent/guardian engagement are indicated in darker shades. The least frequently endorsed practices are indicated in white. Practices which intermediate percentages of staff endorse are indicated by intermediate shades. Grey indicates low survey coverage.

ECEC: early childhood education and care.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.5.13.

Staff encourage families to engage in play and learning at home but the use of home visits and workshops for parents is more variable

Encouraging parents to do play and learning activities at home is one of the family engagement strategies the most often reported by ECEC staff (Table 5.1). In pre-primary settings in Morocco, Spain and Türkiye, it is even more common than keeping parents informed about children's daily activities. Practices that support the quality of the home environment are particularly relevant for addressing disparities, as families from disadvantaged backgrounds tend to spend less time on interactions and activities that promote children's development (Ronfani et al., 2015^[19]). While sharing information can help parents support their child's development, some parents may not know how or when to use such information. Providing more explicit information, such as encouraging parents to engage in specific activities at home, can be one strategy to support children in both their ECEC settings and in their home environments.

Home visits can be an important strategy to build connections between home and ECEC environments for children, as well as to connect with parents (OECD, 2025^[11]). This type of interaction between ECEC staff or leaders and families is a feature of ECEC provision in some countries and subnational entities but is beyond ECEC's purview in others. These different system-level expectations are reflected in the TALIS Starting Strong 2024 data, with more than 90% of leaders saying home visits never take place in pre-primary settings in Denmark, New Zealand** and Sweden; in settings for children under age 3 in the two Canadian provinces; and at both levels of ECEC in Ireland and Norway (Table Leader.33). However, a majority of leaders in pre-primary settings in Chile, Colombia and Türkiye report that home visits take place at least occasionally.

Another way ECEC settings can support children's home environments is through the provision of workshops or courses on child rearing or child development. However, with the exception of pre-primary settings in Chile, where over 85% of leaders indicate these take place at least once per year, workshops or courses for parents and guardians are not widely offered (Table D.5.15). In many other systems, around half of setting leaders say these are provided at least once a year. But at both levels of ECEC in Ireland and New Brunswick (Canada), only around one-quarter of setting leaders say workshops or courses are offered for parents or guardians at least once a year. There may be a missed opportunity to mitigate disparities if some parents do not have access to such information and support, or it is not appropriately targeted.

Encouraging families to participate in decisions and activities at ECEC settings is often less widespread

Practices that involve families more actively, or place more responsibility on families, tend to be less common in ECEC settings than other types of engagement. Encouraging parents to contribute to classroom or playgroup decisions and providing opportunities for families to participate in decision making at the ECEC setting or take on setting-level tasks are among the practices that staff are least likely to say take place in their setting (Table 5.1). Still, there are substantial differences across ECEC systems in how much staff agree these less common practices are employed in their settings. For instance, only around one-third or fewer staff report that parents are encouraged to contribute to classroom/playgroup decisions in pre-primary settings in the Flemish Community of Belgium and Japan and at both levels of ECEC in Germany. Yet more than three-quarters of pre-primary staff in several systems agree this practice applies to their ECEC settings. These types of parental engagement can provide meaningful opportunities for families to participate in their children's ECEC settings, but they can also be demanding on ECEC staff and families. Contributing to classroom/playgroup decisions or activities potentially requires time commitments that conflict with parents' work schedules or require ECEC staff to be available to work with parents outside of their own usual working hours, or in addition to their time with children.

Staff perspectives on parental engagement in their settings are not shaped by the prevalence of diverse characteristics among the children they serve

When staff agreement about the use of different strategies to engage families in the ECEC setting are combined to give an overall picture of staff practices in the setting, there is no link between these practices and the characteristics of the children in the setting in most countries and subnational entities (Table D.5.16). This finding suggests that ECEC staff and settings are neither making a particular effort to engage with families when they serve more children with a different home language, who are from socio-economically disadvantaged homes or with special education needs, nor are they doing less to engage with families in contexts with greater diversity. While it is encouraging that families in more diverse ECEC settings are not systematically less engaged than their counterparts in less diverse settings, this can be a missed opportunity for ECEC to support vulnerable children through stronger links with families in contexts with greater diversity (González-Sancho et al., 2023^[3]). In addition, this does not mean that within a setting, families from different cultural and socio-economic backgrounds are equally likely to engage with staff, which cannot be captured by TALIS Starting Strong 2024.

Policy pointers

- Develop staff capacity to use practices that build awareness and acceptance of diversity, and in particular staff self-efficacy, for stimulating children's interest in different cultures.** As societies become increasingly diverse, ECEC can be a foundation for building openness to differences among young children: staff need to be prepared to support this through a range of activities and materials in their daily work with children. Policies can support the ECEC workforce in these efforts by ensuring there are opportunities for staff learning and practice to build their self-efficacy to promote awareness and acceptance of diversity among children (see Chapters 6 and 7). Likewise, policies can encourage ECEC setting-level strategies to support diversity, which are associated with staff practices in this area. Staff in pre-primary settings in Colombia, at both levels of ECEC in Ireland, and in settings for children under age 3 in New Brunswick (Canada) report the most consistent use of a variety of practices to promote awareness and acceptance of diversity among children.
- Ensure that more diverse ECEC settings are adequately resourced according to their specific needs.** ECEC can be a valuable tool for addressing vulnerabilities and mitigating early inequities among children; however, to successfully meet this objective, additional resources may be needed in settings with greater diversity. Resources can be used to build family engagement practices in these contexts and support the recruitment of staff who are prepared to work with children with different language backgrounds. Ensuring that staff language profiles reflect the profiles of children and families, and that staff have training to support young children's language development in multilingual contexts regardless of their own backgrounds are key strategies (see Chapter 6). Pre-primary settings in Spain and settings for children under age 3 in New Zealand** and Norway have around 40% or more of ECEC settings with higher concentrations of children with different home languages, yet few differences in perceptions of the need for more budgetary resources to support these children among staff working in settings with higher versus lower concentrations of these children. In these systems, resources may be well targeted or universal enough to support staff in their work with children from diverse language backgrounds.
- Strengthen connections between home and ECEC.** In addition to providing resources to enhance family engagement practices in settings with more vulnerable children, ECEC systems can do more to build connections between home and ECEC for all families. Home visits are one strategy, and one in which staff and leaders need training and time to effectively engage in this work outside of the ECEC setting. Strong co-ordination with external partners (e.g. child, family,

social or health services) can also facilitate more connections with children's homes, such as by taking responsibility for arranging home visits and collaborating with ECEC teams to organise services in a family-centred way (see Chapter 9). The specific strategies that ECEC settings use to engage with families reflects the structure of the overall systems (e.g. the roles of leaders, the role of families in setting governance or the integration of different types of services alongside ECEC) and specific policies must reflect these contexts. Nonetheless, Chile stands out as a system where ECEC settings actively engage with families through home visits and the regular provision of courses or workshops for parents and guardians.

References

- Espinosa, L. (2020), "Addressing equity in the ECE classroom: Equal access and high quality for dual language learners", in *Getting it Right: Using Implementation Research to Improve Outcomes in Early Care and Education*, Foundation for Child Development. [7]
- Eurofound (2025), *Working for Children Matters: An Overview of Service Delivery and Workforce in Europe*, Publications Office of the European Union, Luxembourg, <https://www.eurofound.europa.eu/en/publications/all/working-children-matters-overview-service-delivery-and-workforce-europe> (accessed on 19 November 2025). [11]
- González-Sancho, C. et al. (2023), "Levelling the playing field in ECEC: Results from TALIS Starting Strong 2018", *OECD Education Working Papers*, No. 305, OECD Publishing, Paris, <https://doi.org/10.1787/757e4fea-en>. [3]
- Iruka, I., N. Cabrera and M. Páez (2022), "Supporting and engaging with diverse families during the early years: Emerging approaches that matter for children and families", *Early Childhood Research Quarterly*, Vol. 60, pp. 390-393, <https://doi.org/10.1016/j.ecresq.2022.04.001>. [12]
- Kind & Gezin (2014), *Een pedagogisch raamwerk voor de kinderopvang van baby's en peuters* [A Pedagogical Framework for Childcare for Babies and Toddlers], Kind & Gezin, <https://www.vcok.be/media/docs/pedagogische-raamwerk.pdf> (accessed on 19 November 2025). [15]
- Leseman, P. and P. Slot (2025), "Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses", *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [2]
- National Council for Curriculum and Assessment (2024), *Aistear: The Early Childhood Curriculum Framework*, Government of Ireland, <https://www.curriculumonline.ie/getmedia/1e9e4eff-5d44-4950-bfa6-a28f43895d3f/Aistear-FW-ENG.pdf> (accessed on 19 November 2025). [13]
- National Council for Curriculum and Assessment (2009), *Aistear: The Early Childhood Curriculum Framework Guidelines for Good Practice*, Government of Ireland, <https://ncca.ie/media/6306/guidelines-for-good-practice.pdf> (accessed on 19 November 2025). [14]
- Norwegian Directorate for Education and Training (2017), *Framework Plan for Kindergartens*, Government of Norway, <https://www.udir.no/contentassets/7c4387bb50314f33b828789ed767329e/framework-plan-for-kindergartens--rammeplan-engelsk-pdf.pdf> (accessed on 19 November 2025). [16]

- Norwegian Ministry of Education and Research (2025), *Kindergarten Act*, [17]
<https://lovdata.no/dokument/NL/lov/2005-06-17-64> (accessed on 21 August 2025).
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, [1]
 Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>.
- OECD (2024), “Engaging parents and guardians in early childhood education and care centres”, [9]
OECD Education Policy Perspectives, No. 110, OECD Publishing, Paris,
<https://doi.org/10.1787/d05dd1cf-en>.
- OECD (2024), *Nurturing Social and Emotional Learning Across the Globe: Findings from the* [4]
OECD Survey on Social and Emotional Skills 2023, OECD Publishing, Paris,
<https://doi.org/10.1787/32b647d0-en>.
- OECD (2023), *Equity and Inclusion in Education: Finding Strength through Diversity*, OECD [5]
 Publishing, Paris, <https://doi.org/10.1787/e9072e21-en>.
- OECD (2021), *Starting Strong VI: Supporting Meaningful Interactions in Early Childhood* [10]
Education and Care, Starting Strong, OECD Publishing, Paris,
<https://doi.org/10.1787/f47a06ae-en>.
- Pianta, R., K. La Paro and B. Hamre (2008), *Classroom Assessment Scoring System (CLASS)* [6]
Manual, Pre-K, Teachstone.
- Republic of Türkiye Ministry of National Education (2024), *Türkiye Yüzyılı Maaarif Modeli Okul* [18]
Öncesi Eğitim Programı [The Century of Türkiye Education Model’s Early Childhood
Education Programme],
<https://tymm.meb.gov.tr/upload/program/2024programokuloncesiOnayli.pdf> (accessed on
 19 November 2025).
- Ronfani, L. et al. (2015), “The complex interaction between home environment, socioeconomic [19]
 status, maternal IQ and early child neurocognitive development: A multivariate analysis of
 data collected in a newborn cohort study”, *PLOS ONE*, Vol. 10/5, p. e0127052,
<https://doi.org/10.1371/journal.pone.0127052>.
- Yurtsever, A., J. Anderson and J. Grundy (2023), “Bilingual children outperform monolingual [8]
 children on executive function tasks far more often than chance: An updated quantitative
 analysis”, *Developmental Review*, Vol. 69, p. 101084,
<https://doi.org/10.1016/j.dr.2023.101084>.

6

Developing early childhood education and care staff expertise

This chapter examines the capacity of early childhood education and care (ECEC) systems to develop staff expertise through initial education and professional development opportunities. It examines the role of initial education in preparing staff for their work with children, patterns of staff participation in professional development and the barriers they face when seeking to engage in ongoing training. The chapter focuses on how ECEC systems can support staff participation in job-embedded professional development.

Key findings

- **Initial educational attainment beyond upper-secondary levels enables staff to cover more topics that are relevant for their work with children and thereby enhance their self-efficacy.** Higher initial qualifications tend to be associated with greater breadth of content at both ECEC levels. Staff who have covered more topics in their initial education and professional development report higher levels of self-efficacy in their work with children.
- **Professional development often takes the form of courses and seminars rather than job-embedded training and collaborative learning approaches (for example coaching or induction) that can support staff's use of child-centred and adaptive pedagogical practices.** Chile, Colombia, the Flemish Community of Belgium, Japan, Morocco and Sweden (at the pre-primary level); and Israel and New Zealand** (at both levels of ECEC) stand out for strong uptake of job-embedded professional development activities. Participation in job-embedded training and collaborative learning activities is a positive predictor of staff's adoption of high-quality practices with children, including child-centred approaches to structuring and facilitating learning and daily adaptive pedagogical practices in several ECEC systems.
- **In-person professional development remains common while participation in online courses is associated with lower perceived impact of professional development than in-person or hybrid participation in some systems.** In six countries and subnational entities at the pre-primary level and two for settings for children under age 3, staff who participated in online courses are less likely to perceive their general participation in professional development as impactful relative to those who participated in in-person or hybrid formats.
- **A lack of staff to fill-in for absences is a major barrier to staff participation in professional development.** In most ECEC systems, barriers to participation in professional development relate to the support for professional development rather than staff's skills or qualifications. Lack of replacement staff is a key barrier in most systems, together with the high cost of professional development and a lack of time.
- **ECEC staff receive limited support to participate in professional development, although support can alleviate barriers to participation and enhance participation in job-embedded training and collaborative learning.** Materials needed for activities and release from work with children during regular working hours are the most common types of support received, but less than 45% of staff (at both levels of ECEC) benefit from them. Providing support is associated with higher participation in job-embedded training and collaborative learning activities in most countries and subnational entities.
- **Staff report a widespread need for training in some areas, particularly in working with children with special education needs and those whose home language is different than the language of the ECEC setting, topics that have been less covered in staff's recent training.** In most countries and subnational entities, staff's professional development needs in these areas stem more from access-related barriers to participating in professional development than a lack of training opportunities on these topics.

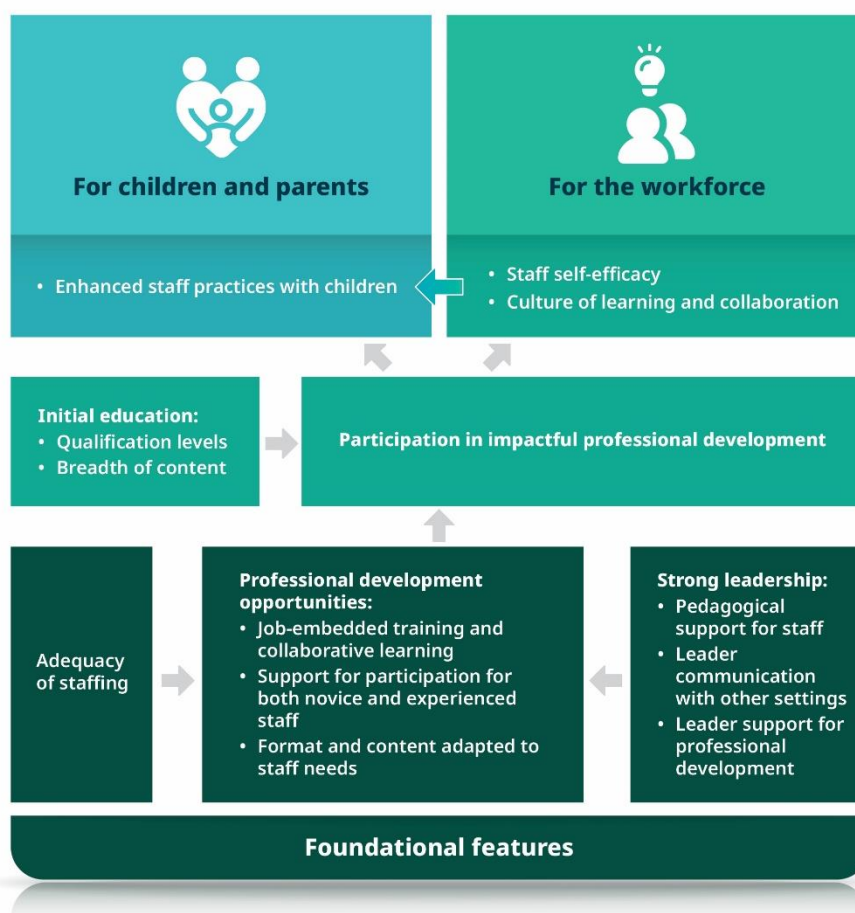
ECEC staff who work in environments that are attractive and rich in professional learning opportunities that support them to grow as professionals are the foundation of strong ECEC systems (Leseman and Slot, 2025^[1]). Developing the workforce's skills and knowledge through initial education and continuous professional development is central to quality interactions that can enhance children's learning, development and well-being. Initial education and training programmes can underpin a shared definition of effective practices across ECEC staff (OECD, 2019^[2]). In turn, quality continuous professional development enables staff to critically reflect on their practices, keep up to date on new developments, and bridge gaps in knowledge and skills (OECD, 2025^[3]). Opportunities to build and sustain expertise in the workforce are at the core of ECEC systems' abilities to attract and retain staff, particularly since they can support career progression and job satisfaction (OECD, 2025^[3]; 2020^[4]).

The Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024 asks staff about the content and qualification levels of their initial education or training programmes, enabling insights into how ECEC systems can develop staff expertise (Figure 6.1). The survey also contains information about staff's participation in professional development in the 12 months prior to the survey, including the type, content and mode of delivery. It collects evidence on the barriers staff face when seeking to engage in professional development, the support they receive to participate in training and their ongoing professional development needs. The analysis in this chapter on professional development activities and topics includes both staff and leaders with staff duties, that is, those leaders who regularly work directly with children in a pedagogical way (see the Reader's Guide for more information). While leaders with staff duties likely have specific professional development needs given the complexity of their roles, their work with children means that their ongoing training opportunities should encompass the topics available to staff.

This chapter aims to address the following questions:

- What thematic areas do staff cover in their initial education and training to work with children?
- How do staff engage in professional development and what barriers hinder their participation?
- How are novice staff supported to adapt to their roles?
- How do initial education and professional development support staff self-efficacy? What professional development needs do staff report?

Figure 6.1. Analytical framework for developing early childhood education and care expertise



Building on initial education through ongoing training

Coherent initial education and professional development opportunities are critical to ensure staff can acquire and develop skills at all stages of their careers, in alignment with their background, needs and roles (OECD, 2020^[4]). The content and qualification level of staff's initial education, including whether they received training specifically to work with young children, influence the quality of the ECEC provided (OECD, 2025^[3]). Initial education is also a strong building block for further engagement in professional development. While there is no single recipe for quality professional development, research has identified several characteristics that tend to lead to effective professional development experiences, including a focus on staff strategies associated with specific curriculum content, active learning, sustained duration, embeddedness in collective practice, coherence with staff's knowledge and experience (Boeskens, Nusche and Yurita, 2020^[5]; Minea-Pic, 2020^[6]; OECD, 2024^[7]). Digital technologies have increasingly permeated education and training systems and can support staff professional development, when the above-mentioned features that shape effective professional development experiences are also addressed.

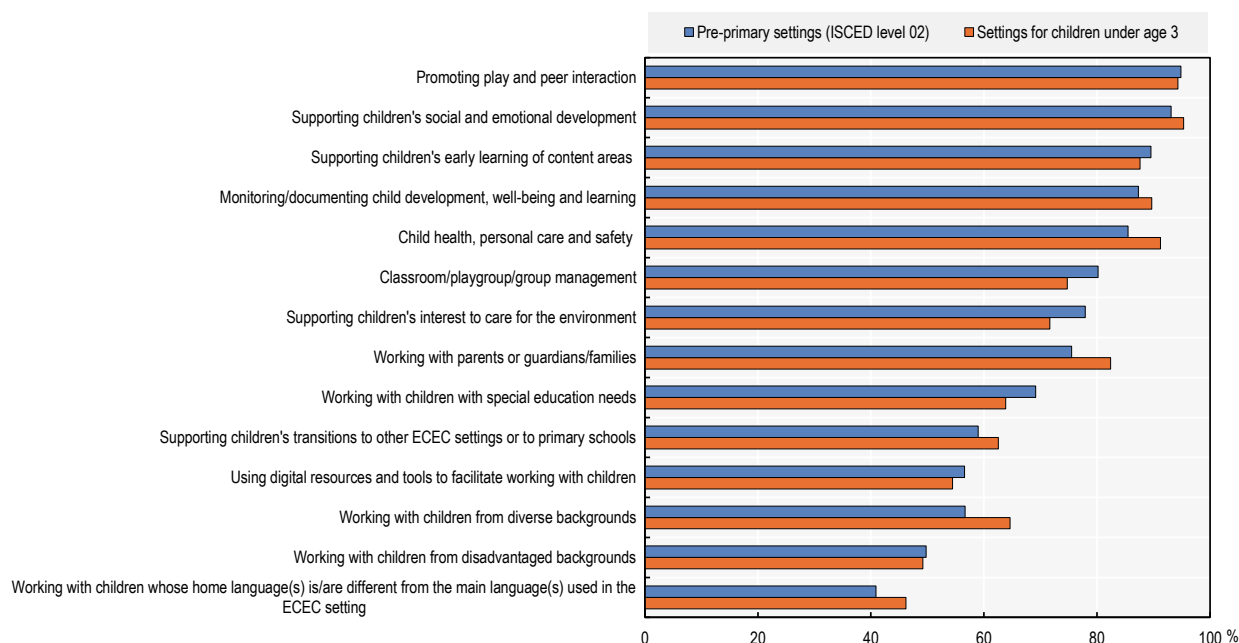
TALIS Starting Strong 2024 collects rich evidence on the content and type of initial education and professional development activities staff engage in. This section builds on the profiles of ECEC staff described in Chapter 2 and examines staff reports of the content areas covered in their initial education or training programme that prepared them to work with children; the types, content and delivery modes of professional development activities they participated in during the 12 months prior to the survey; and their perceived impact of recent participation in professional development on their work with children.

Higher initial educational attainment tends to be associated with greater breadth of content

Initial education or training programmes that prepared staff to work with children span a broad range of thematic areas (Figure 6.2, Table Staff.14). In almost all ECEC systems, at both levels, on average, over 80% of staff received initial training in promoting play and peer interaction; supporting children's social and emotional development; early learning of content areas; monitoring/documenting child development, well-being and learning; and in child health, personal care and safety. In settings for children under age 3, working with parents or guardians/families is part of initial education for over 80% of staff, on average in almost all countries and subnational entities. In contrast, working with children from diverse or disadvantaged backgrounds or whose home language is different from the language of the ECEC setting are typically underrepresented topics in initial education for staff, although bridging equity gaps is a concern in many ECEC systems.

Figure 6.2. Content of initial education or training programmes for early childhood education and care staff

Average percentage of staff whose initial education or training programmes covered the following content areas



Notes: Only staff who indicated they received training to work with children received this question. Averages exclude New Zealand.

ECEC: early childhood education and care.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table Staff.14.

StatLink  <https://stat.link/ns9urj>

Some content areas are covered to similar extents across countries and subnational entities, suggesting they are considered to be at the core of staff's initial education to work with children, while others are included in initial training to different degrees (Figure 6.2). Supporting children's interest to care for the environment is almost universally covered in the initial education of pre-primary staff in Colombia, Japan, Morocco and Türkiye and of staff in settings for children under age 3 in Ireland, Israel and New Brunswick (Canada). However, only around half of pre-primary staff in Denmark and Germany and of staff in settings

for children under age 3 in the Flemish Community of Belgium and Germany report this type of initial education or training programme.

Initial educational attainment beyond upper secondary enables staff to cover more topics that are relevant for their work. Higher initial educational attainment tends to be associated with greater breadth of content at both levels, in countries and subnational entities where it is possible to compare different staff education profiles (Table D.6.1; see also Chapter 2). In most countries and subnational entities at both ECEC levels, staff with a bachelor's degree covered more topics in their initial education or training programme than those whose highest educational attainment is upper secondary.

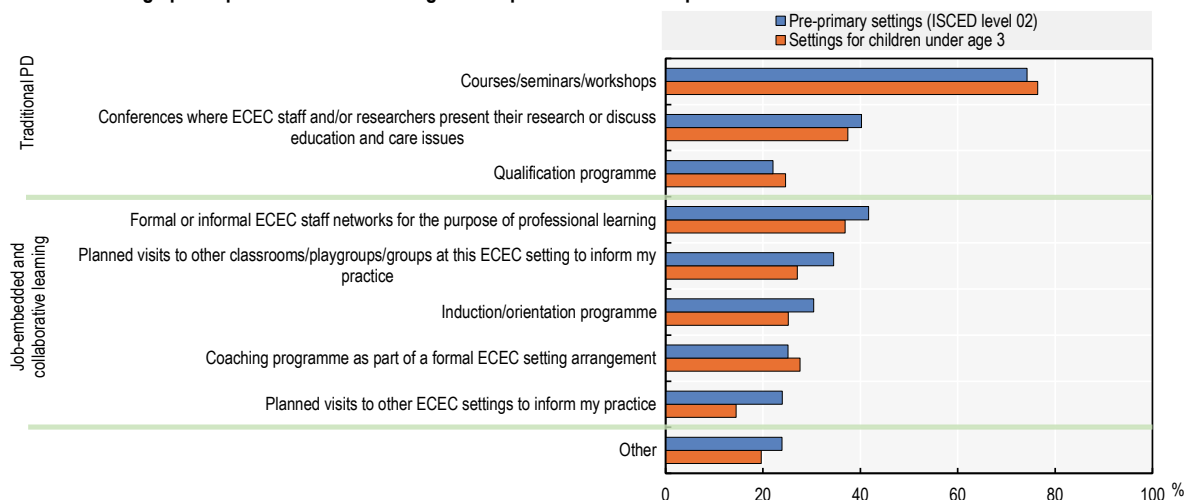
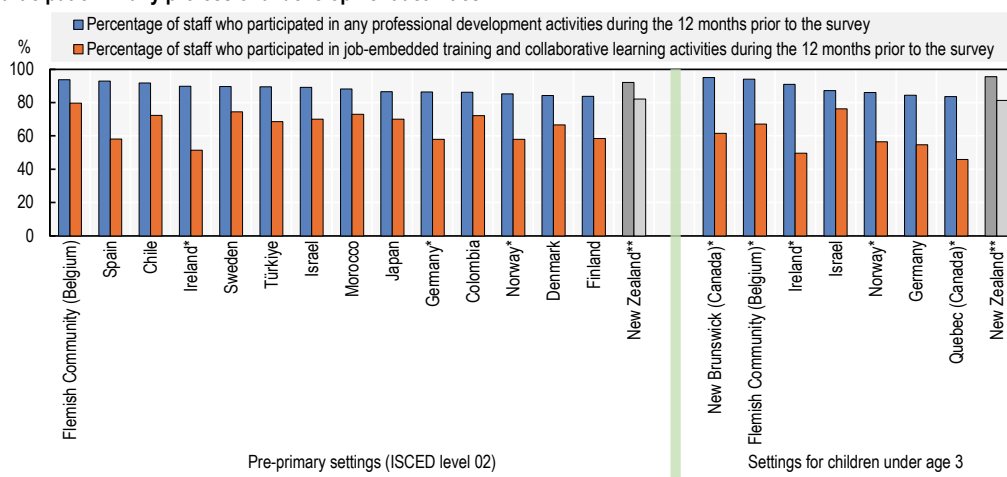
Some ECEC systems, such as Ireland, Israel, New Brunswick (Canada) and Quebec (Canada) for settings for children under age 3 rely on post-secondary vocational and short-cycle tertiary education (ISCED levels 4 and 5; see Chapter 2). In these countries and subnational entities, staff having some post-secondary education (ISCED level 4 and above) have also covered more thematic areas in their initial education than those with lower qualification levels.

Professional development often takes the form of courses and seminars rather than job-embedded training and collaborative learning that can support staff adaptive pedagogy and child-centred planning

In all countries and subnational entities at both levels of ECEC, more than 80% of staff participated in professional development in the 12 months prior to the survey (Figure 6.3, Table D.6.2). High professional development uptake can result from mandatory participation requirements but can also reflect staff's intrinsic motivation to engage in training and supports for professional development participation. Notably, in all countries and subnational entities, participation in courses, seminars or workshops is the most prevalent type of ongoing ECEC staff training. This may reflect a higher availability and offer of such professional development activities, but also the facility to engage in them through in-person, hybrid or virtual formats (Table Staff.15).

Figure 6.3. Professional development activities for early childhood education and care staff

Percentage of staff who participated in each type of professional development activity in the 12 months prior to the survey

Panel A: Average participation in different categories of professional development activities**Panel B: Participation in any professional development activities**

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes:

ECEC: early childhood education and care.

PD: professional development.

Panel A: Averages exclude New Zealand.

Panel B: Countries and subnational entities, except New Zealand, are ranked in descending order of the percentage of staff who participated in any professional development activities in the 12 months prior to the survey.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Tables D.6.2 and D.6.3.

StatLink  <https://stat.link/btwqle>

While participation in professional development has often consisted of individual engagement in one-off sessions (e.g. courses, conferences), job-embedded and collaborative approaches to training have increasingly emerged as more impactful and cost-effective (Egert, Fukkink and Eckhardt, 2018^[8]; Markussen-Brown et al., 2017^[9]; OECD, 2020^[4]; 2025^[3]). Participation in job-embedded training and

collaborative learning activities is a positive predictor of staff's adoption of child-centred approaches to structuring and facilitating learning and of daily adaptive pedagogical practices in several ECEC systems, even when a set of other staff and setting-level characteristics are accounted for (Tables D.5.3 and D.5.4; see Chapter 4). Staff engagement in professional collaborative practices is indeed the most consistent predictor of their adoption of pedagogical approaches and practices with children (see Chapter 9).

Job-embedded training and collaborative learning activities are less widespread across ECEC systems than participation in courses or seminars (Figure 6.3, Panel A). Fewer ECEC staff engage in coaching, induction programmes, planned visits to other ECEC settings or to other classrooms/playgroups/groups at their own setting to inform their practice than in courses or seminars. While this pattern holds across all countries and subnational entities at both ECEC levels, some systems combine high overall participation in professional development with strong uptake of job-embedded training and collaborative learning activities. This is the case in Chile, Colombia, the Flemish Community of Belgium, Japan, Morocco and Sweden at the pre-primary level; and Israel and New Zealand** at both levels of ECEC (Figure 6.3, Panel B).

When specific job-embedded training and collaborative learning activities are considered separately, a few countries stand out for staff participation in such activities (Table D.6.2). Around two-thirds of staff working in settings for children under age 3 in Israel and half of pre-primary staff in Israel and Morocco participated in coaching programmes. Pre-primary staff in Colombia, Israel and Morocco are also numerous to engage in induction or orientation programmes, likely related to the relatively high shares of less experienced staff, particularly in Colombia and Morocco (see Chapter 2). In the Flemish Community of Belgium and Japan, around one in two ECEC staff in pre-primary settings have visited other groups at their setting to inform their practice. More than half of pre-primary setting staff in Chile, New Zealand** and Sweden engage in professional learning networks.

Recent professional development activities cover play and theories on the development, well-being and learning of children but less frequently working with vulnerable children

ECEC staff across participating countries and subnational entities covered similar areas in professional development activities in the 12 months prior to the survey (Table Staff.16 and Table 6.1). For both levels of ECEC, theories on the development, well-being and learning of young children; promoting play and peer interaction; and supporting children's social and emotional development are the most frequent content areas where staff report ongoing training. A range of other areas, including working with children from diverse or disadvantaged backgrounds or whose home language is different from the main language used in the setting do not rank high among recent professional development topics. These are areas that are also generally less covered in initial education or training for staff working with children, and also among the areas where staff report a high need for training (see Table 6.3).

Table 6.1. Content areas covered by professional development in the 12 months prior to the survey

Percentage of staff who report each content area was covered in recent professional development activities

	Theories on the development, well-being and learning of young children	Child health, personal care and safety	Promoting play and peer interaction	Supporting children's early learning of content areas	Supporting children's social and emotional development	Supporting children's interest to care for the environment	Classroom/ playgroup/ group management	Monitoring/ documenting child development, well-being and learning	Using digital resources and tools to facilitate working with children	Working with children whose home language(s) is/are different from the main language(s) used in the ECEC setting	Working with children with special education needs	Working with children from disadvantaged backgrounds	Working with children from diverse backgrounds	Working with parents or guardians/ families	Supporting children's transitions to other ECEC settings or to primary schools
Pre-primary settings (ISCED level 02)															
Chile	78	66	78	70	81	72	57	65	53	15	74	34	45	66	34
Colombia	95	85	92	74	92	91	81	87	66	34	64	63	66	76	79
Denmark	86	30	74	53	46	19	52	53	25	27	47	38	18	44	32
Finland	57	38	74	47	73	36	41	52	37	27	52	19	28	42	21
Flemish Comm. (Belgium)	60	33	53	62	47	22	32	43	47	36	40	22	23	25	18
Germany*	55	54	39	32	54	18	19	37	16	19	29	14	18	36	18
Ireland*	71	75	76	64	77	58	50	66	42	30	64	43	46	61	55
Israel	66	68	80	63	78	65	58	62	54	24	43	36	a	47	43
Japan	75	60	76	53	61	66	44	63	26	5	64	27	19	63	47
Morocco	87	91	94	82	90	87	91	85	62	57	63	49	a	75	77
Norway*	82	50	77	55	79	35	35	58	36	34	44	15	27	50	30
Spain	51	47	67	58	69	45	57	55	80	21	61	29	33	39	27
Sweden	46	31	60	65	57	35	40	50	48	28	50	19	28	29	19
Türkiye	72	67	75	77	77	67	58	64	60	22	48	41	a	59	57
<i>New Zealand**</i>	73	69	72	66	82	61	30	72	31	44	68	28	45	55	42
Settings for children under age 3															
Flemish Comm. (Belgium)*	85	80	82	56	76	33	29	60	39	33	35	23	26	55	31
Germany	62	52	40	35	53	12	18	39	19	15	22	14	17	43	13
Ireland*	71	80	78	63	82	69	54	71	45	31	62	43	50	69	58
Israel	81	91	89	62	86	71	71	74	40	29	27	33	a	48	51
New Brunswick (Canada)*	91	66	90	78	93	74	73	85	55	48	56	41	56	74	43
Norway*	80	44	74	53	77	37	30	51	39	32	40	16	28	46	14
Quebec (Canada)*	85	72	72	52	82	49	44	68	56	22	53	29	35	62	32
<i>New Zealand**</i>	75	70	74	54	84	52	42	71	35	47	47	27	45	53	45

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells reflects the within-country ranking of content areas covered by professional development. In each country, the most frequently reported content areas covered by professional development are indicated in darker shades. The least frequently reported content areas covered by professional development are indicated in white. Content areas reported by intermediate percentages of staff are indicated by intermediate shades. Grey cells indicate low survey coverage.

a: The question was not administered in pre-primary settings in Israel, Morocco and Türkiye, and in settings for children under age 3 in Israel.

ECEC: early childhood education and care. Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table Staff.16StatLink  <https://stat.link/q1to9z>

The contents of recent staff professional development activities tend to overlap with those included in their initial education. The variation between countries and subnational entities in the number of areas covered in both initial education and professional development generally reflects the variation in the number of areas covered in professional development activities only (Table D.6.4). This pattern may result from broad initial training and potentially limited professional development topic offerings, leading staff to participate in professional development mainly to refresh their knowledge or fill skills gaps rather than explore new themes.

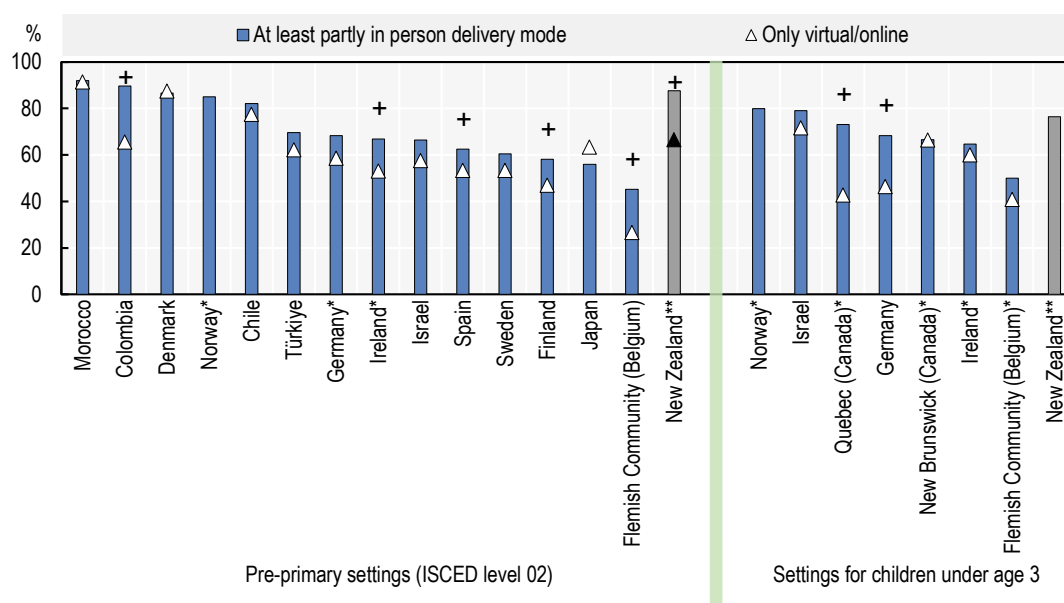
In-person professional development remains common while participation in online courses is associated with lower perceived impact of professional development

On average, ECEC staff attended 2-4 professional development activities in the 12 months prior to the survey (Table D.6.5). While a majority of pre-primary staff participate in professional development activities in person, staff in some countries and subnational entities also have relatively high engagement in hybrid forms of professional development (Table D.6.6). Around 40% of pre-primary staff in New Zealand**, Spain, Sweden and Türkiye participated in at least one hybrid professional development activity – that is, activities delivered both in person and virtually/online – in contrast to fewer than 20% in Colombia, Denmark and Germany. Ireland, New Zealand**, Spain and Türkiye combine relatively high levels of hybrid and online participation. Staff working in settings for children under age 3 also preponderantly participate in in-person professional development. New Brunswick (Canada) and Quebec (Canada) stand out as exceptions, with more staff training online than in person.

Staff report their perceptions about the impact of their recent participation in professional development in general, rather than related to specific activities. In six countries and subnational entities at the pre-primary level and two in settings for children under age 3, fewer staff who participate in online courses perceived their general participation in professional development as impactful compared with those offered in person or in hybrid formats (Figure 6.4). Pre-primary staff in Chile, Denmark and Morocco are exceptions, with a high average perceived impact of participation in professional development among staff who engaged in courses, seminars or workshops in person and online.

Figure 6.4. Perceived impact of professional development participation, by participation mode in courses/seminars/workshops

Percentage of staff who report that their participation in professional development activities had a positive impact on their work with children “quite a bit” or “a lot”, by participation mode in courses/seminars/workshops



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

+ indicates that the difference between the two participation modes is statistically significant.

Notes: Staff were asked about the positive impact of their participation in professional development activities in the 12 months prior to the survey in general, not about the impact of specific professional development activities.

The figure only shows valid data. Values that are not shown were based on too few observations to ensure reliability.

Countries and subnational entities, except New Zealand, are ranked in descending order of the percentage of staff who reported that their participation in professional development activities had a positive impact on their work with children among those who participate in courses/seminars/workshops at least partly in person.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.6.7.

StatLink  <https://stat.link/in9u2m>

The delivery mode of professional development only appears to relate to perceived impact insofar as staff engage in courses, seminars or workshops. For other types of professional development opportunities – conferences, qualification programmes, coaching, induction programmes and professional networks – there are generally no statistically significant differences in most countries and subnational entities (where it is possible to compare across delivery modes) in perceived impact between staff who engaged online in professional development activities and those who attended in-person or hybrid formats at both ECEC levels.

Identifying and addressing barriers to professional development

The effectiveness of professional development experiences hinges on the extent to which ECEC staff can participate in them. A range of obstacles related to time, relevance or cost can hinder access to professional development. Having sufficient time is a necessary, though not a sufficient condition, for

professional development participation. Engaging in professional development can also entail direct and indirect costs for staff (Boeskens, Nusche and Yurita, 2020^[5]; OECD, 2019^[2]). While digital technologies can enhance professional development accessibility, online or hybrid professional development also requires a range of pre-conditions for staff engagement, including access to technology and staff digital skills (Minea-Pic, 2020^[6]). Professional development experiences delivered online may take place at times when staff have other commitments or responsibilities, thereby decreasing their incentives to participate. Barriers to professional development participation may also be more pronounced for some categories of staff than for others. Adequate time, funding and specialised resources (i.e. materials, specialised expertise) are critical for the design of impactful professional development experiences that effectively engage staff (Campbell, DeLuca and LaPointe-McEwan, 2022^[10]; OECD, 2024^[7]).

This section investigates inequalities in professional development participation over the 12 months prior to the survey based on staff's roles and background and barriers hindering their engagement in professional development. TALIS Starting Strong 2024 also gathers data on the supports ECEC staff receive to participate in professional development. It also asks leaders in centre-based settings about the adequacy of staffing in their centres as a barrier to the provision of a quality environment for children's development, well-being and learning; for pre-primary settings, this aspect of ECEC setting human resources is examined as a factor that contributes to the barriers staff experience in accessing ongoing professional development.

Assistants and staff with lower initial qualification levels participate less in training, though some job-embedded training and collaborative learning activities enable more staff to participate

While engagement in professional development tends to be widespread among ECEC staff, there are differences in participation associated with staff roles and background. In pre-primary settings, teachers are significantly more likely to have participated in professional development in the 12 months prior to the survey than assistants in 6 countries and subnational entities (Table D.6.8). Differences in participation between teachers and assistants are also observed among staff working in settings for children under age 3 in Germany, Israel and Norway. At both ECEC levels, staff who hold higher levels of initial education participate more in professional development (Table D.6.3). Israel stands out for relatively large gaps in participation by the initial education and training of staff across all professional development activities at both levels of ECEC.

Countries and subnational entities with inequalities in overall participation in professional development tend to exhibit gaps in participation across most types of professional development activities (Table D.6.8). These patterns likely reflect different entitlements to professional development for teachers and assistants, but also differential supports received for ongoing training. At both ECEC levels, gaps in participation are most noteworthy for participation in courses, seminars and workshops; conferences for ECEC staff; qualification programmes; planned visits to other ECEC settings; and formal or informal staff networks for the purpose of professional learning.

Despite the overall patterns, there are a range of nuances in the types of professional development activities in which staff participate (Table D.6.8). Assistants are as likely and sometimes even more so to engage in some types of job-embedded training and collaborative learning forms of professional development at both ECEC levels – planned visits to other classrooms/playgroups/groups at the ECEC setting and induction programmes. In addition, in Chile, Morocco and Norway, a range of professional development activities – including conferences for ECEC staff, qualification programmes, planned visits to ECEC settings (other or one's own) or coaching programmes – include a similar share of pre-primary staff with different initial education levels (Table D.6.3). Planned visits to ECEC settings (other or one's own), coaching programmes and induction programmes are also equally attended by staff working in settings for children under age 3 with varying levels of education in the Flemish Community of Belgium, Germany,

Ireland and Norway. Such job-embedded approaches to professional development that enable staff to engage in learning in their job contexts may be by design more likely to engage a wider variety of staff, irrespective of their background or level of education.

A lack of staff to fill-in for absences is a major barrier to participating in professional development

ECEC staff across participating countries and subnational entities report similar barriers to professional development participation (Table 6.2 and Staff.20). Barriers concentrate around the lack of support received by staff for engagement rather than staff background or skills. Lack of replacement staff, the high cost of professional development and a lack of time (either due to other commitments or responsibilities or to conflicts with work schedules) are top obstacles to professional development across most systems for both ECEC levels. In contrast, obstacles related to staff members' own skills or qualifications to engage are less prevalent. For instance, pre-requisites for participation are not identified as a key issue for participation in professional development in most countries and subnational entities. Access to digital resources and necessary skills for using technology are perceived as a barrier to participation in pre-primary settings in Colombia, Japan and Morocco, as well as in both levels of ECEC in Israel.

Insufficient staff to fill-in for absences stands out as the main obstacle to staff participation in nine countries and subnational entities at the pre-primary level and in all systems at the level of settings for children under age 3. Likewise, leader reports of the adequacy of staffing as a barrier to quality in centre-based pre-primary settings are linked with reports of insufficient staff being a barrier to their participation in professional development. Less adequate staffing at the setting level increases the likelihood that pre-primary staff report a lack of replacement staff as a barrier to professional development in Colombia, the Flemish Community of Belgium, Morocco, Norway and Sweden (Table D.6.9). In these contexts, staff likely rely on colleagues from their own setting to cover absences during training, making inadequate staffing a key obstacle to participating in professional development. In contrast, in other systems, inadequate staffing is not associated with an increased likelihood of staff reporting insufficient replacement staff as a barrier to training participation. In these systems, more centralised replacement opportunities that enable staff replacements from other centres when participating in professional development or job-embedded opportunities or other types of support (e.g. training activities organised outside opening hours) may support staff participation in professional development even when centre-level staffing is inadequate.

Staff reports of a lack of replacement staff as a barrier to their professional development activities do not appear to be related to other setting-level characteristics (location, setting size, management type) in most ECEC systems. In contrast, some individual-level characteristics do matter: novice staff (with three years or less of experience), staff working part time or staff without a permanent contract are less likely to report a lack of replacement staff as a barrier in several ECEC systems.

Table 6.2. Barriers to participation in professional development for early childhood education and care staff

Percentage of staff who report that they “agree” or “strongly agree” that the following are barriers to professional development

	I do not have the pre-requisites needed to attend	I lack the skills to use necessary digital resources and tools	I do not have access to necessary digital resources and tools	I do not have the necessary language skills	Transportation to and/or from the location where the professional development is delivered is difficult	Professional development is too expensive	There is a lack of ECEC setting leader support	Professional development conflicts with my work schedule	I do not have time due to other commitments or responsibilities	No professional development is offered in areas of my interest	There are no incentives to participate	There is insufficient staff to fill-in for my absence
Pre-primary settings (ISCED level 02)												
Chile	9	24	24	32	33	76	23	60	46	44	70	68
Colombia	32	42	53	35	47	65	30	43	37	34	62	53
Denmark	11	16	20	16	8	45	22	43	40	44	32	58
Finland	15	22	14	20	23	44	18	52	46	20	48	61
Flemish Community (Belgium)	6	22	15	7	18	51	15	33	39	22	19	69
Germany*	10	19	17	8	13	33	10	25	27	22	19	47
Ireland*	14	15	23	18	21	65	32	56	61	30	57	67
Israel	16	29	32	15	21	37	10	34	46	28	50	54
Japan	11	34	30	40	31	30	13	43	60	18	25	50
Morocco	16	25	38	16	50	53	21	32	28	20	40	51
Norway*	11	22	26	13	9	49	15	36	49	22	24	62
Spain	9	22	19	21	23	49	8	46	70	39	56	62
Sweden	13	18	10	9	9	47	22	39	34	36	19	51
Türkiye	6	9	12	23	29	49	13	53	55	20	46	64
<i>New Zealand**</i>	12	12	8	10	14	46	18	43	56	27	42	32
Settings for children under age 3												
Flemish Community (Belgium)*	10	9	13	11	11	33	12	29	33	19	19	59
Germany	19	17	8	6	14	39	15	27	26	19	18	53
Ireland*	18	19	29	23	26	69	41	59	61	35	62	74
Israel	17	27	36	19	22	40	13	35	41	23	40	49
New Brunswick (Canada)*	15	12	13	19	21	30	28	38	53	25	36	54
Norway*	11	23	23	11	5	52	9	35	51	21	23	65
Quebec (Canada)*	18	6	14	27	13	39	19	37	39	15	29	56
<i>New Zealand**</i>	0	15	12	8	18	51	24	45	49	35	34	40

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells reflects the within-country ranking of barriers to professional development. In each country, the most frequently reported barriers to professional development are indicated in darker shades. The least frequently reported barriers to professional development are indicated in white. Barriers to professional development with which intermediate percentages of staff “agree” or “strongly agree” are indicated by intermediate shades. Grey cells indicate low survey coverage.

ECEC: early childhood education and care.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table Staff.20.

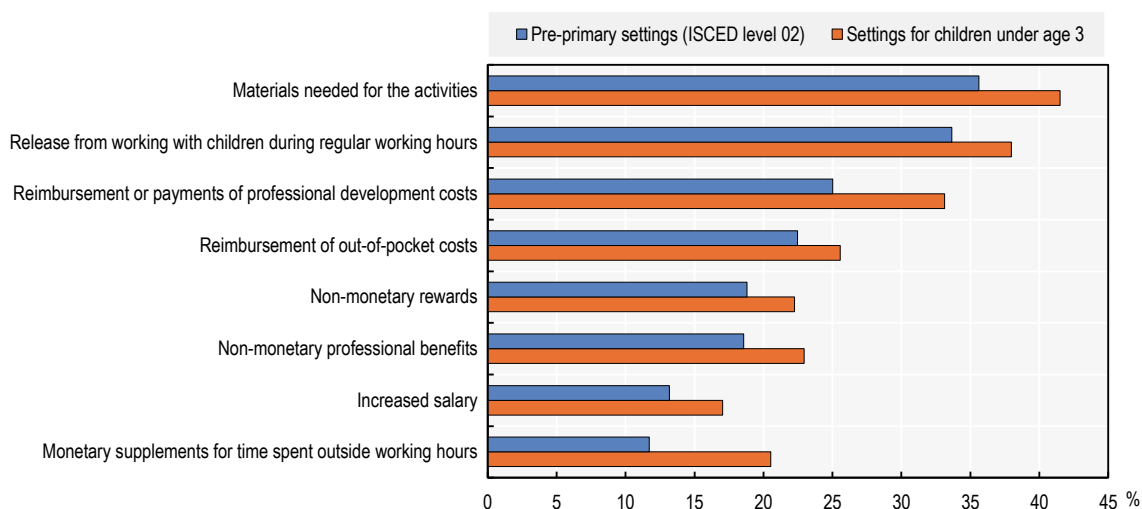
ECEC staff receive limited support to engage in professional development, although support can alleviate barriers to participation

Among staff who participated in professional development in the 12 months prior to the survey, receiving support for participation in professional development is not widespread (Table D.6.10). Materials needed for activities (for example office supplies) and release from working with children during regular working hours are the most recurrent types of support received, but they each cover a relatively limited share of staff (Figure 6.5). Monetary support in the form of reimbursement of professional development costs or of out-of-pocket costs are the next most common types of support provided to staff. Like reimbursement of costs, few pre-primary staff benefit from increased salary or supplements for time spent outside working hours to engage in professional development.

In most countries, efforts to support participation tend to be concentrated around two or three areas of support, with few countries providing comprehensive support to staff. Germany (at both ECEC levels), Japan (at the pre-primary level) and New Zealand** (at both ECEC levels) stand out with a relatively higher share of staff benefiting from release from working with children, reimbursement of costs and materials for professional development activities. ECEC systems are adopting strategies to facilitate staff participation in qualification programmes while working by partly covering the financial costs of qualifications or recognising prior learning (Box 6.1).

Figure 6.5. Support for early childhood education and care staff's participation in professional development activities

Average percentage of staff who received the following supports for participation in professional development in the 12 months prior to the survey



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Note: Averages exclude New Zealand.

Countries and subnational entities are ranked in descending order of the percentage of staff in pre-primary settings who reported they received different types of support for their participation in professional development in the 12 months prior to the survey.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.6.10.

StatLink  <https://stat.link/mk2hgo>

Box 6.2. Supporting professional development participation

In Ireland, the Nurturing Skills Learner Fund is supporting the professional development of early childhood education and care (ECEC) staff with the objective of raising educational attainment in the workforce (Irish Department of Children, Disability and Equality, 2025^[11]). The scheme covers 90% of the fees incurred by staff working in the sector who engage in a government-approved ECEC qualification. The fund also aids the recruitment and retention of early years staff, by supporting career pathways and reducing the upfront financial costs faced by ECEC staff who wish to upskill. By the end of 2025, the fund had funded 700 ECEC staff, with the first graduates expected in 2026. To reduce the administrative burden on staff, higher education institutions receive the funding directly. The Nurturing Skills Learner Fund is co-funded by the European Union through the European Social Fund+ and by the government of Ireland through the Employment, Inclusion, Skills and Training programme 2021-27.

Quebec (Canada) has implemented two initiatives to support staff seeking to obtain a qualification while working. The Early Childhood Work-Study Pathway is designed for novice staff who are paid to attend foundational training three days per week. The remaining two days are spent working in an ECEC setting. The Recognition of Acquired Competencies initiative targets experienced staff seeking to obtain a recognised diploma without returning to full-time studies. Post-secondary institutions oversee the process that allows staff to demonstrate the skills they have developed through professional and personal experience. Competencies are assessed through interviews and workplace observations. Tailored learning strategies (for example, small-group training, targeted readings) address identified gaps. To support this process, the government of Quebec has provided funding to employers to release and compensate staff for up to 96 hours during this process. The two government-funded initiatives, led by a single co-ordinating body, were developed through collaboration between a wide range of stakeholders.

Support for professional development participation can break down barriers to participation. For instance, professional development costs and limited replacement staff are major barriers to participation in most countries and subnational entities, while staff receive limited support in these areas. This is the case in Spain, where only 9% of staff in pre-primary education report benefiting from release from working with children when they engage in professional development and lack of replacement staff ranks high among the barriers to professional development. In contrast, in Japan (for pre-primary settings), reimbursements or payments of professional development costs tend to be widespread while the cost of professional development is not a major barrier to participation.

Participation in job-embedded training and collaborative learning tends to be higher where non-monetary support is available, with staff in some systems benefiting from a combination of supports

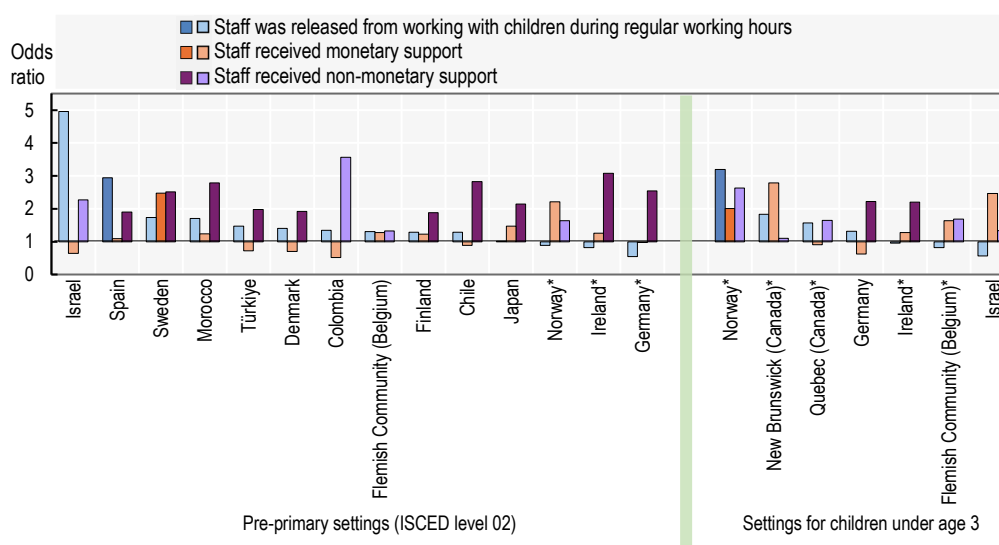
Non-monetary support in the form of materials needed for the activities, non-monetary rewards (for example classroom/group resources, book vouchers) or non-monetary professional benefits (i.e. fulfilling professional development requirements, improving promotion opportunities) is associated with higher participation in job-embedded training and collaborative learning in most countries and subnational entities at the pre-primary level and in two countries and subnational entities in settings for children under age 3 (Figure 6.6 and Table D.6.11). These results are robust to the consideration of the three types of support for professional development participation jointly – non-monetary support, monetary support and staff releases from working with children – and of staff, leader and setting-level characteristics that can be related to staff participation in job-embedded training and collaborative learning. These types of non-monetary rewards and benefits may be provided following participation in professional development

and are not necessarily the reason that staff engage in specific types of professional development activities. Nonetheless, providing such supports can encourage staff to decide to engage in professional development or leaders to create more opportunities for staff to make use of ongoing training opportunities.

In some countries and subnational entities, a combination of support types is associated with enhanced participation in job-embedded training and collaborative learning. Along with non-monetary support, monetary support is also positively related to staff participation in job-embedded training and collaborative learning in Sweden (at the pre-primary level). In Spain (at the pre-primary level), staff are also more likely to participate in job-embedded training and collaborative learning when they benefit from non-monetary support and release from working with children during regular working hours, whereas in Norway (in settings for children under age 3) monetary support and release from working with children are positively associated with participation.

Figure 6.6. Associations between types of support for professional development participation and staff participation in job-embedded training and collaborative learning for staff in early childhood education and care

Likelihood of staff participation in job-embedded training and collaborative learning associated with different types of support for participation in professional development



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Results show odds ratios from a single multivariable logistic regression model linking staff participation in job-embedded training and collaborative learning to three different types of support provided for professional development participation (release from working with children and monetary and non-monetary support). Statistically significant results are indicated in a darker colour. For more information, see Annex C. Results do not include New Zealand due to small sample sizes.

ECEC: early childhood education and care.

Countries and subnational entities are ranked in descending order of the strength of the association between staff participation in job-embedded training and collaborative learning and staff being released from working with children during regular working hours.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.6.11.

StatLink  <https://stat.link/tx1m82>

In addition, leaders' frequent (monthly or weekly) communication with staff and/or leaders from other ECEC settings is associated with higher staff engagement in job-embedded training and collaborative learning in the Flemish Community of Belgium (at both levels of ECEC), Ireland (at the pre-primary level) and Norway

(in settings for children under age 3). Some job-embedded training and collaborative learning activities, including professional networks or planned visits to other groups in the setting or other ECEC settings, are likely to be more easily developed and implemented when leaders exchange often with staff and/or leaders from other ECEC settings. Leader support for staff pedagogical learning is also related to higher pre-primary staff participation in planned visits to other classrooms/playgroups/groups at the same ECEC setting in Colombia, Germany, Morocco and New Zealand** (Table D.6.12) and to higher pre-primary staff participation in induction programmes in Finland, Norway and Spain (Table D.6.13).

Supporting novice staff to adapt to their roles in early childhood education and care

Novice staff are critical for addressing workforce shortages. These staff can bring fresh energy and ways of thinking to ECEC centres, but they are, by definition, new to their jobs. The nature of work in ECEC settings requires staff to multi-task and shift frequently between different job demands (see Chapters 4 and 5). It is, therefore, essential to support novice staff to navigate these many aspects of their work. Staff training needs vary depending on factors such as their career stage, work context and the needs of children in their group, and novice staff are likely to have different professional development needs than their more experienced colleagues. In this context, a one-size-fits-all approach to professional development is neither appropriate nor effective (Campbell et al., 2017^[12]; OECD, 2024^[7]). Induction/orientation programmes can support staff integration in new settings and the profession, fostering commitment and potential interest for further engagement in professional development (OECD, 2020^[4]).

TALIS Starting Strong data allow comparisons of professional development indicators between novice staff (with three years of experience or less) and more experienced staff. This section examines participation of novice staff in professional development, focusing on induction and coaching programmes. It also investigates barriers experienced by novice staff as they seek to engage in professional development and the support novice staff receive to participate in professional development.

Participation in professional development activities is overall similar for novice and experienced staff, though novice staff tend to engage more in induction programmes

In most ECEC systems, novice and more experienced (with more than three years of experience) staff display similar levels of participation in professional development (Table D.6.2). In Denmark, Finland, Spain, Sweden and Türkiye (at the pre-primary level) and in Israel and Quebec (Canada) (in settings for children under age 3), fewer novice than experienced staff report participating in any professional development activities in the 12 months prior to the survey. Only in Japan do novice pre-primary staff participate more in ongoing training than more experienced staff.

When a range of staff, setting and leader-level characteristics are accounted for, novice staff are more likely to participate in induction/orientation programmes than their more experienced colleagues (ten years of experience or more) in five countries and subnational entities at the pre-primary level and in one country for settings for children under age 3 (Table D.6.13). Induction activities may target not only staff who are new to the profession but also those who recently joined the setting. As reported by leaders of novice staff, in most ECEC systems at both levels, induction activities in the setting tend to focus on supervision by the ECEC setting leader/experienced staff, working in a team with experienced ECEC staff and general/administrative induction (Table D.6.14) – activities which may also benefit staff new to an ECEC setting irrespective of their level of experience.

Participation in coaching is not widespread among novice staff. Only in Morocco (at the pre-primary level) and Israel (in settings for children under age 3) do more than half of novice staff report participation in a coaching programme (Table D.6.2). These are also systems with relatively high shares of novice staff

whose leaders report that coaching is part of induction activities available at the ECEC setting (Table D.6.14). In most systems, novice and more experienced staff are equally likely to engage in structured coaching programmes (Table D.6.15). In Sweden (at the pre-primary level) and in Norway (in settings for children under age 3), novice staff are more likely to participate in coaching, whereas the opposite is true in Denmark and Spain (at the pre-primary level) and in Germany and Israel (in settings for children under age 3). These variations in participation patterns are likely linked to differences in programme design whereby, in some countries, coaching may be part of induction for novice staff whereas in others it is used more to refine practice among those with more experience.

In some systems, novice staff receive less support to participate in professional development

Novice and experienced staff at both ECEC levels tend to face similar barriers to professional development participation when a range of staff and setting-level characteristics are accounted for (Tables D.6.9, D.6.16, D.6.17, D.6.18 and D.6.19). However, in a range of ECEC systems, more experienced staff tend to benefit more from some types of professional development support (Table D.6.20). In six countries and subnational entities at the pre-primary level and in four for settings for children under age 3, more experienced staff are more likely to receive reimbursements or payments of professional development costs than novice staff. Release from working with children during regular working hours is also more recurrent among experienced staff in Colombia and Finland (at the pre-primary level) and Germany (at both levels of ECEC). In settings for children under age 3, monetary supplements for time spent outside working hours also benefit experienced staff more in Germany, Ireland, New Brunswick (Canada) and Quebec (Canada).

Novice staff may require more tailored support measures to address emerging needs as they enter the profession and a new setting, and they receive this support in some countries and subnational entities. In Türkiye (at the pre-primary level) and in the Flemish Community of Belgium and Ireland (in settings for children under age 3), novice staff are more likely to report a range of supports for their professional development participation than more experienced staff (Table D.6.20).

Empowering staff to feel confident in their work in early childhood education and care

Staff self-efficacy refers to the degree to which ECEC staff feel comfortable and confident about their capacity to plan and implement job-specific tasks and to promote children's development, learning and well-being. Positive self-efficacy can promote greater job satisfaction and work engagement while reducing stress (see Chapter 8), which in turn supports staff retention and encourages the use of practices that foster enhanced interactions with children (OECD, 2020^[4]; 2025^[3]). Staff's confidence in their ability to perform tasks effectively can also shape their likelihood of remaining in the profession. Quality initial education and continuous professional development that meet staff professional development needs can support staff self-efficacy (Cadima et al., 2024^[13]; OECD, 2020^[4]; Tanaka et al., 2020^[14]).

To capture their self-efficacy, TALIS Starting Strong 2024 asks ECEC staff about the extent to which they feel they can do a range of activities or practices. This section explores links between staff self-efficacy across these areas and the breadth of initial education and ongoing professional development content. It also examines ongoing staff needs in terms of professional development content.

Staff who have covered more topics in their initial education and professional development report higher self-efficacy levels

ECEC staff at both levels display a rather strong sense of self-efficacy across most areas of their work with children. In almost all countries and subnational entities, around 90% of staff report feeling they are able to provide children with a feeling of security, help children to interact with each other and show good social behaviour, and help children develop creativity and problem solving with “a lot” or “quite a bit” of ease (Table Staff.24). Staff report a lower sense of confidence in their ability to use digital resources and tools to facilitate working with children, stimulating children’s interest in cultural differences and commonalities, and supporting the development of children from disadvantaged backgrounds, with wide cross-country variations in reported self-efficacy in these areas.

The breadth of training content is positively associated with staff’s sense of overall self-efficacy for their work with children (Tables D.6.21, D.6.22 and D.6.23). In nearly all countries and subnational entities at both ECEC levels, staff who covered more topics in their initial education or training programmes that prepared them to work with children or those who covered more topics during their recent professional development activities report higher self-efficacy (Tables D.6.21 and D.6.22). Cumulative training in a range of topics, whereby staff have covered topics in both their initial education or training programme and in their recent professional development participation, is also positively linked with their sense of self-efficacy. While these results account for a range of staff and setting-level characteristics, the level of support staff receive in their work may also shape their perceived sense of self-efficacy.

The relationship between training breadth and staff self-efficacy can work both ways. Staff who cover more areas in their training are more likely to feel self-confident about their ability to perform a variety of job-related tasks. At the same time, staff who are more comfortable about their capacity to carry out their activities may also be more inclined to explore job-specific topics through professional development or feel sufficiently at ease in their work to make time for professional development.

Novice staff in the Flemish Community of Belgium and Sweden (at the pre-primary level) and Israel (in settings for children under age 3) have a lower sense of self-efficacy than more experienced staff when the breadth of training content in initial education and professional development is accounted for (Table D.6.23). This suggests that additional support levers are needed to make novice staff in these countries and subnational entity increase their confidence in their ability to perform a range of job-specific tasks.

Staff report a widespread need for training in supporting children with special education needs, an area little covered in recent training

Staff at both levels share similar professional development needs across ECEC systems. Working with children with special education needs is the main area where staff report a high need for professional development, followed by working with children whose home language is different from that of the ECEC setting (Table 6.3 and Table Staff.19). Other strong professional development needs relate to supporting children’s social and emotional development (at pre-primary level), using digital resources and tools to facilitate working with children (at pre-primary level), and working with children from disadvantaged backgrounds (at both ECEC levels).

Staff who have focused on working with children with a different home language or children with special education needs as part of their initial education or training programme that prepared them to work with children are less likely to report training needs in these areas (Tables D.6.24 and D.6.25). In contrast, participation in professional development in the 12 months prior to the survey does not appear to make a difference in staff’s expressed needs on these topics in most countries and subnational entities. Staff who have recently attended training may have done so in other content areas than working with children who have a different home language or children with special education needs. Indeed, despite the widespread

need for ongoing training on working with children with special education needs or those with a different home language, these areas rank high among the contents most commonly covered in recent staff training only in very few countries and subnational entities (see Table 6.1).

Staff professional development needs in working with children with a different home language or children with special education needs tend to be associated more with access-related barriers to professional development participation rather than the absence of a training offer on these topics. In several countries and subnational entities at both ECEC levels, staff who report limited professional development accessibility (due to cost, distance or lack of technology), lack of staff skills (digital or language) or pre-requisites to attend professional development (qualifications or experience) as barriers to professional development participation are more likely to report training needs in working with children whose home language is different from that of the ECEC setting or with children with special education needs. Reports of lack of ECEC setting leader support and insufficient staff to fill-in for staff absences as barriers to participation are also associated with staff reports of professional development needs in working with children with special education needs in several systems. In contrast, in most systems, staff professional development needs do not appear to reflect a lack of a training offer in these areas nor a lack of incentives to participate.

Staff who work with more children whose home language is different from the language of the ECEC setting tend to report more professional development needs in this area, although this is less the case for working with children with special education needs, which is generally an area of high need. These findings align with results showing that staff who work in settings with greater concentrations of children with a different home language also view the need for greater support for these children in the ECEC sector budget (see Chapter 5) and underscore the need for targeted professional development support for staff in these contexts.

Table 6.3. Professional development needs of staff in early childhood education and care settings
Percentage of staff who report a “high” level of need for professional development in the following content areas

	Theories on the development, well-being and learning of young children	Child health, personal care and safety	Promoting play and peer interaction	Supporting children's early learning of content areas	Supporting children's social and emotional development	Supporting children's interest to care for the environment	Classroom/ playgroup/ group management	Monitoring/ documenting child development, well-being and learning	Using digital resources and tools to facilitate working with children	Working with children whose home language is different from the language of the setting	Working with children with special education needs	Working with children from disadvantaged backgrounds	Working with children from diverse backgrounds	Working with parents or guardians/ families	Supporting children's transitions to other ECEC settings or to primary schools
Pre-primary settings (ISCED level 02)															
Chile	15	14	17	22	33	20	12	12	24	40	56	20	20	18	20
Colombia	26	20	23	30	31	25	22	23	36	32	36	25	24	25	22
Denmark	11	4	12	14	16	9	10	10	11	15	30	24	11	9	7
Finland	2	2	3	5	10	3	6	5	13	12	19	9	8	2	3
Flemish Community (Belgium)	2	3	3	6	9	3	5	7	15	16	28	13	10	5	5
Germany*	15	9	18	21	38	16	14	16	24	26	37	24	16	19	13
Ireland*	7	7	8	9	11	9	13	8	15	21	22	13	10	9	9
Israel	26	22	28	24	32	24	18	21	26	19	28	19	a	18	17
Japan	57	74	65	52	66	62	50	55	37	22	76	46	34	74	58
Morocco	29	30	27	34	34	28	28	31	48	32	41	31	a	22	21
Norway*	7	4	6	10	15	9	7	7	20	22	25	19	15	4	5
Spain	9	12	13	14	27	11	18	12	20	20	45	25	22	16	11
Sweden	3	3	5	8	9	6	4	7	10	14	24	14	8	5	7
Türkiye	5	7	10	9	10	10	9	10	18	30	22	17	a	8	8
New Zealand**	5	3	7	9	14	10	7	9	8	12	29	13	10	8	7
Settings for children under age 3															
Flemish Community (Belgium)*	2	2	3	4	4	6	3	3	4	8	13	9	7	4	6
Germany	16	10	16	22	39	12	14	18	17	20	38	19	16	20	10
Ireland*	5	7	5	8	9	9	13	7	13	25	21	17	14	8	9
Israel	23	24	27	23	31	24	22	26	23	17	25	16	a	20	21
New Brunswick (Canada)*	5	6	7	9	11	8	10	10	13	20	23	18	15	10	12
Norway*	6	6	8	11	12	12	11	11	18	23	28	22	17	8	7
Quebec (Canada)*	3	3	3	7	10	9	7	5	8	12	32	11	8	9	8
New Zealand**	10	6	7	11	12	14	15	6	14	19	35	14	13	7	15

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells reflects the within-country ranking of areas for professional development. In each country, the most frequently reported areas for professional development needs are indicated in darker shades. The least frequently reported areas for professional development needs are indicated in white. Areas for professional development needs for which intermediate percentages of staff reported having a high need are indicated by intermediate shades. Grey cells indicate low survey coverage.

a: The question was not administered in pre-primary settings in Israel, Morocco and Türkiye, and in settings for children under age 3 in Israel. ECEC: early childhood education and care.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table Staff.19.

Policy pointers

- Support the development of and participation in job-embedded training and collaborative learning.** Professional development is often delivered through courses rather than job-embedded and collaborative learning approaches, despite evidence that job-embedded and collaborative approaches are more impactful for staff learning and linked with enhanced staff practices with children. Policies can enhance staff participation in job-embedded training and collaborative learning by designing effective support systems for staff participation (for example reimbursement of costs, non-monetary supports), equipping leaders to strengthen staff pedagogical learning and foster within- and cross-setting professional learning communities (see Chapter 7), and creating mechanisms to recognise and reward diverse professional learning activities beyond courses or seminars. Chile, Colombia, the Flemish Community of Belgium, Japan, Morocco and Sweden (at the pre-primary level) and Israel and New Zealand** (at both levels of ECEC) combine high overall participation in professional development with strong uptake of job-embedded training and collaborative learning activities.
- Allocate resources for professional development to support more equal access.** The high cost of professional development and lack of replacement staff hinder participation in professional development. Beyond material support for staff professional development, introducing centralised pools of replacement staff can go hand-in-hand with more innovative, targeted funding strategies to steer the development of job-embedded training and collaborative learning approaches that support setting-wide professional learning and respond to local priorities and needs. Certain job-embedded professional development activities (i.e. coaching) can take place while working with children, helping to minimise challenges related to staff replacement. Policies to attract and retain staff (see Chapter 8) can help address the more structural reasons underlying the lack of replacement staff in the sector.
- Make time for professional development.** Time is a central issue in many ECEC systems. Making time for professional development often requires tackling the issue of staff to fill in for absences, which can be challenging in a context of staff shortages. Regulations regarding working time can provide alternative solutions, by securing time for professional development in staff members' annual working time, integrating time for collaborative learning in their planning, and ensuring requirements and/or entitlements cover all categories of staff in similar ways.
- Better leverage digital technologies for professional development to ensure impactful learning.** Participation in online courses is associated with lower perceived impact of professional development than in-person or hybrid participation in some systems. To enhance the impact of digital learning experiences, the principles of effective in-person professional development need to be embedded in digital formats. Pre-primary staff in Denmark and Morocco report a high perceived impact from professional development, regardless of whether they participated in courses, seminars or workshops delivered in person or online. Developing standards for high-quality professional learning across delivery modes can be combined with the design of mechanisms to approve, certify and monitor training in digital environments for quality.
- Support novice staff to evolve in the sector.** Novice staff participate more in induction programmes but face similar barriers to professional development participation as more experienced colleagues and in some systems, they benefit from less support to participate. Sustained and tailored support for novice staff participation in ongoing training, accompanied by investments in leaders and mentors through adequate training and protected time to support novice staff can enhance the development of novice staff in their roles. Mechanisms that clarify how novice staff can progress professionally combined with tailored supports and training opportunities to fill gaps at different career stages can further enhance staff engagement and retention.

References

- Boeskens, L., D. Nusche and M. Yurita (2020), "Policies to support teachers' continuing professional learning: A conceptual framework and mapping of OECD data", *OECD Education Working Papers*, No. 235, OECD Publishing, Paris, <https://doi.org/10.1787/247b7c4d-en>. [5]
- Cadima, J. et al. (2024), "Does support for professional development in early childhood and care settings matter? A study in four countries", *Early Childhood Education Journal*, Vol. 53/4, pp. 1181-1193, <https://doi.org/10.1007/S10643-024-01669-X/TABLES/6>. [13]
- Campbell, C., C. DeLuca and D. LaPointe-McEwan (2022), *Teacher-led Learning Circles: Developing Teacher Leadership and Teaching Practice for the Use of Formative Assessment to Improve Students' Learning*, Education International, Brussels, <https://www.ei-ie.org/en/item/27004:teacher-led-learning-circles-developing-teacher-leadership-and-teaching-practice-for-the-use-of-formative-assessment-to-improve-students-learning> (accessed on 31 January 2024). [10]
- Campbell, C. et al. (2017), *The State of Educators' Professional Learning in Canada: Final Research Report*, Learning Forward, Oxford, OH, <https://learningforward.org/wp-content/uploads/2017/08/state-of-educators-professional-learning-in-canada.pdf>. [12]
- Egert, F., R. Fukkink and A. Eckhardt (2018), "Impact of in-service professional development programs for early childhood teachers on quality ratings and child outcomes: A meta-analysis", *Review of Educational Research*, Vol. 88/3, pp. 401-433, <https://doi.org/10.3102/0034654317751918>. [8]
- Irish Department of Children, Disability and Equality (2025), "Minister Foley announces the opening of applications for a new fund to upskill early years staff", press release, <https://www.gov.ie/en/department-of-children-disability-and-equality/press-releases/minister-foley-announces-the-opening-of-applications-for-a-new-fund-to-upskill-early-years-staff> (accessed on 25 August 2025). [11]
- Leseman, P. and P. Slot (2025), "Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses", *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [1]
- Markussen-Brown, J. et al. (2017), "The effects of language- and literacy-focused professional development on early educators and children: A best-evidence meta-analysis", *Early Childhood Research Quarterly*, Vol. 38, pp. 97-115, <https://doi.org/10.1016/J.ECRESQ.2016.07.002>. [9]
- Minea-Pic, A. (2020), "Innovating teachers' professional learning through digital technologies", *OECD Education Working Papers*, No. 237, OECD Publishing, Paris, <https://doi.org/10.1787/3329fae9-en>. [6]
- OECD (2025), *TALIS Starting Strong 2024 Conceptual Framework*, OECD Publishing, Paris, <https://doi.org/10.1787/f49228be-en>. [3]
- OECD (2024), *Cultiver l'excellence dans l'apprentissage et le développement professionnel des personnels de l'éducation: Renforcer l'impact des écoles académiques de la formation continue en France*, OECD Publishing, Paris, <https://doi.org/10.1787/cd020f15-fr>. [7]

- OECD (2020), *Building a High-Quality Early Childhood Education and Care Workforce: Further Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/b90bba3d-en>. [4]
- OECD (2019), *Providing Quality Early Childhood Education and Care: Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/301005d1-en>. [2]
- Tanaka, N. et al. (2020), "Improving early care and education professionals' teaching self-efficacy and well-being: A mixed methods exploratory study", *Early Education and Development*, Vol. 31/7, pp. 1089-1111, <https://doi.org/10.1080/10409289.2020.1794246>. [14]

7

Developing leadership in early childhood education and care settings

This chapter examines leadership in early childhood education and care (ECEC) settings. It analyses how leaders are prepared and supported, including participation in professional development and whether training aligns with their needs. It explores variations in leadership functions and autonomy and how these shape leaders' perceived influence and reliance on public support. The chapter also analyses how resources, structural conditions and access to professional development relate to leadership practices that distribute responsibilities, support staff's pedagogical learning and foster innovation. The chapter highlights the critical role of leadership in strengthening system quality and workforce stability and provides policy pointers to build leadership capacity for high-quality, equitable ECEC systems.

Key findings

- **Strong leadership practices, including distributed leadership, support for staff's pedagogical learning and innovative practices, are closely associated with staff satisfaction with leadership.** In most ECEC systems, distributed leadership is linked to greater satisfaction with the setting's leadership, which in turn contributes to staff's pedagogical practices with children. Coaching and targeted professional development are associated with greater uptake of strong leadership practices.
- **Most leaders engage in professional development, yet some of the more impactful activities are less common.** While participation in training is high, coaching is less common, with fewer than 20% of leaders engaging in this type of professional development in pre-primary settings in Sweden and Türkiye, in settings for children under age 3 in Ireland and New Brunswick (Canada), and in both levels of ECEC in Norway.
- **Leaders indicate professional needs in key leadership areas which were not systematically covered in recent training activities.** Theoretical and system-level aspects of leadership are top areas for professional needs and were unequally covered in recent training activities. Promoting staff well-being and providing effective feedback are other key professional development needs despite having broad coverage, while human resource and financial management were less consistently addressed in recent training activities. In contrast, leaders report low professional development needs in collaborating with other ECEC settings or primary schools, parents or guardians, and to some extent with community services, despite these areas being key to supporting children's development, learning and well-being.
- **Leaders' autonomy varies across governance contexts and setting types.** Pedagogical responsibilities are more often shared with staff, while administrative and financial tasks more frequently involve external actors. Leaders in pre-primary settings in Ireland, Japan and Sweden often hold full responsibility for these areas, compared to boards or governments in Chile, Colombia, Morocco and Türkiye. Autonomy tends to be greater in privately managed or chain-affiliated settings and in settings for children under age 3. Where autonomy is limited, leaders are more likely to report less influence over important decisions.
- **In most countries and subnational entities, a majority of leaders report needing greater support from local, regional or national institutions.** These figures exceed 80% in pre-primary settings in Colombia, Japan, Morocco, Spain and Türkiye and 70% in Ireland and Israel for leaders in settings for children under age 3.
- **Distributed leadership is a common feature across ECEC systems, reflecting strong collaboration between leaders and staff; parents' engagement is less widespread.** Distributed leadership is less prevalent in settings facing staff shortages. In settings for children under age 3, it may arise more frequently as on-site staff assume greater responsibility in response to the specific operational demands of provision for younger children, where leaders supervise multiple settings.
- **Engagement in standard pedagogical leadership practices is widespread, but less so for more strategic practices.** Most leaders collaborate with staff more than once a week to improve how children play together and to observe staff practices and interactions with children. By contrast, more strategic practices to support long-term planning and organisational coherence are less frequent, with most leaders reporting that they develop or communicate a vision for the setting no more than once a month.

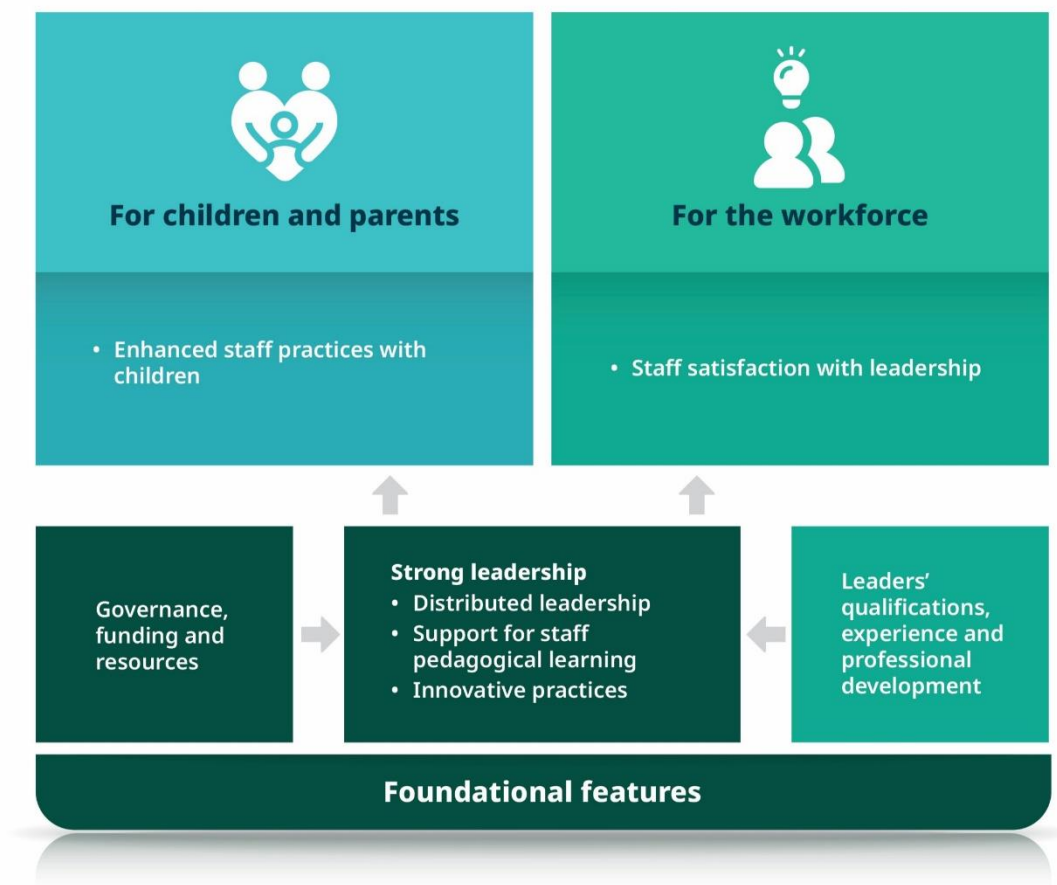
Leadership is a key driver of quality in ECEC. Leaders shape how ECEC settings operate; navigate challenges; and implement improvements that benefit children, families and staff, ultimately contributing to a well-functioning and resilient sector (Douglass, 2019^[1]; Kirby et al., 2021^[2]). This reflects the multifaceted nature of leadership, which extends beyond administrative oversight to include fostering collaboration, supporting staff development, engaging families and creating learning environments that meet the diverse needs of young children.

Governance frameworks and organisational models shape how leadership is organised and practiced across countries and institutional contexts (OECD, 2020^[3]). Well-designed governance structures provide ECEC leaders with clear guidance, adequate resources and a shared strategic vision, supporting them in managing complex responsibilities (Douglass, 2019^[1]). At the same time, these governance structures can enhance leader autonomy by enabling flexibility in decision making, allowing leaders to tailor strategies to the needs of their settings and local communities. These contextual factors can influence how leadership responsibilities and decision-making processes are structured within ECEC settings. While different leadership models can be effective, their success in practice depends on the context as well as the availability of setting-level resources, institutional mechanisms, and leaders' education and access to professional development opportunities, which support them to operate effectively within their respective structures (Douglass, 2019^[1]; Kirby et al., 2021^[2]). With these supports in place, leaders can adopt practices that enhance staff practices, improve the quality of interactions with children and foster positive work environments that mitigate stress among ECEC staff caused by heavy workloads, which are essential for retaining a qualified workforce and sustaining high-quality ECEC systems (Figure 7.1) (see Chapter 8).

This chapter examines how leadership is enacted across countries and systems participating in the Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024, focusing on the factors that shape variations in leadership structures and practices. Specifically, the chapter addresses the following questions:

- What types of professional development opportunities are available to ECEC leaders, and what are their main professional development needs?
- How does leaders' autonomy vary within and across systems, and how does this relate to their decision-making and support needs?
- In what ways do setting and leader characteristics shape how distributed leadership, leaders' support for staff's pedagogical learning and innovations in the setting are enacted?
- How are leadership structures and practices associated with staff satisfaction with leadership?

Figure 7.1. Analytical framework for building strong early childhood education and care by strengthening leadership



Engaging leaders in continuous professional development

As for staff, professional development is a key lever for strengthening leaders' roles in ECEC systems, but its effectiveness depends on its quality, structure and accessibility. High engagement among leaders across systems may reflect a shared recognition of its value. Collaborative formats, such as mentoring, peer learning and coaching, are linked to improved leadership practices and greater confidence and self-efficacy (Kirby et al., 2021^[2]). Beyond enhancing administrative and instructional capacity, professional development that supports strategic planning and collaboration can foster continuous improvement within ECEC settings (Douglass and Kirby, 2022^[4]). However, availability, frequency and accessibility have been shown to vary widely across countries and setting types, influenced by governance models, institutional resources and policy priorities (Douglass, 2019^[1]; Kirby et al., 2021^[2]; Leseman and Slot, 2025^[5]). These contextual factors affect not only the types of opportunities offered but also the extent to which participation is supported, through time, funding or incentives, potentially limiting leaders' ability to develop a broad range of competencies (Leseman and Slot, 2025^[5]).

As part of TALIS Starting Strong 2024, leaders report the types of professional development activities they participated in over the 12 months prior to the survey, the topics covered and needs for further training for

15 topics. This section presents findings based on these recent experiences; it, therefore, does not reflect leaders' full professional development history.

Leaders widely engage in professional development, but some more impactful activities are less common

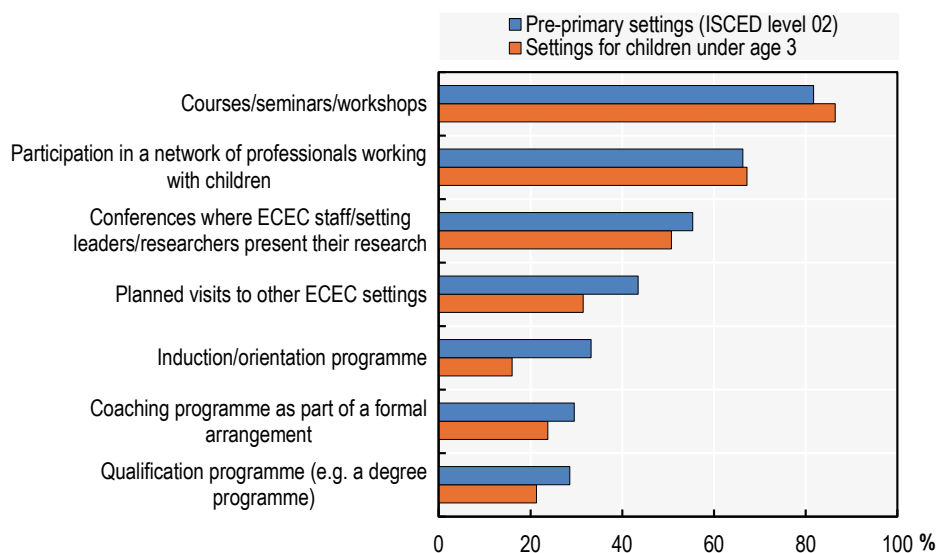
Participation in professional development is high in most systems, with around or over 90% of leaders reporting engaging in at least one professional development activity (Table Leader.9). However, participation is lower in Chile, Colombia and Morocco at the pre-primary level and in Quebec (Canada) for settings for children under age 3, where 65-85% of leaders report engagement. Traditional formats such as courses, seminars and workshops are the most common (Figure 7.2), though access modes differ: nearly half of leaders in settings for children under age 3 in New Brunswick (Canada) report accessing courses online only, compared to fewer than 5% in both levels of ECEC in the Flemish Community of Belgium (Table Leader.9).

Engagement in collaborative learning formats is common, with participation in professional networks ranking as the second most prevalent type of activity. This is a positive finding, as collaboration is an important feature of future-oriented systems (see Chapter 9). However, there is variation across systems (Table D.7.1). Participation in professional networks exceeds 80% among pre-primary leaders in Denmark and at both levels of ECEC in the Flemish Community of Belgium and Norway, but is less than 40% in Colombia and Morocco in pre-primary settings. On a more negative note, coaching, which is an impactful form of training, is the least widespread format among collaborative professional development (Figure 7.2). In many systems, fewer than 40% of leaders engage in coaching, with participation below 20% in pre-primary settings in Sweden and Türkiye, in settings for children under age 3 in Ireland and New Brunswick (Canada), and in both levels of ECEC in Norway. By contrast, over 40% of pre-primary leaders in Germany and Japan and over 60% in Chile report receiving coaching as part of their professional development. Planned visits to other ECEC settings are common in pre-primary settings in Finland, the Flemish Community of Belgium and Japan, where more than half of pre-primary leaders report engaging in this activity. Such visits are, however, less common in settings for children under age 3, where participation is below 50% across all systems.

Participation in induction programmes, which are used for preparing novice leaders, is relatively limited across many systems (Table D.7.2). Fewer than 15% of leaders engaged in such programmes at both levels of ECEC provision in Germany and Norway, at the pre-primary level in Spain, and in New Brunswick (Canada) and Quebec (Canada) in settings for children under age 3. Participation in qualification programmes is below 40% in most systems at both levels of ECEC, except in Türkiye, where more than half of pre-primary leaders report participation.

Figure 7.2. Type of professional development activities attended by leaders of early childhood education and care settings

Average percentage of ECEC settings whose leaders participated in each type of professional development activity in the 12 months prior to the survey



Notes: Estimates include leaders who responded “yes, in person”, “yes, virtual or online”, or “yes, in person and virtual/online”.

Averages for pre-primary settings exclude New Zealand. Averages for settings for children under age 3 exclude Israel and New Zealand.

ECEC: early childhood education and care.

Activities are ranked in descending order of the average percentage of pre-primary leaders who reported participation in the 12 months prior to the survey.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.7.1.

StatLink  <https://stat.link/icbpx3>

Theoretical and system-level aspects of leadership and promoting staff well-being are top areas for professional needs, but were unequally covered in recent training

The darker shadings in Table 7.1 highlight the most frequently reported areas for further training within each system. Percentages in bold italics indicate topics for which the percentage of leaders who received recent training on that topic was less than the country or subnational entity average for training across all topics. Darker shading without a percentage in bold italics therefore shows alignment between professional need and coverage in recent training while darker shading with a percentage in bold italics shows great professional need and lack of coverage in recent training. There are similarities across systems in the professional needs leaders considered to be a priority, or not.

Theoretical and system-level aspects of leadership (knowledge and understanding of new developments in leadership research and of current national/local policies on ECEC) are top areas for professional needs in most countries and subnational entities. Staff-focused areas, including supporting staff well-being and providing effective feedback, are also frequently prioritised, yet coverage in recent training is uneven. In 9 out of 15 systems at the pre-primary level and 2 out of 8 systems for children under age 3, training on providing effective feedback is offered to fewer leaders than the respective country or subnational entity average across all topics. By contrast, supporting staff well-being is covered at above-average levels in many systems, but is a common area of reported need. Receiving training in a given area may not only reduce the perceived need for further professional development by strengthening leaders’ professional

self-efficacy, it may also stimulate it, as leaders become more aware of the depth of their knowledge and skills and the positive effects of professional development on their practices, a pattern which is also reflected in ECEC staff reports (OECD, 2020^[3]) (see Chapter 6).

There are also similarities in the topics that are less often prioritised for training. This is the case for collaborating with other ECEC settings or primary schools, with parents or guardians, and to some extent with community services, except in Colombia, Japan and Morocco in pre-primary settings. Promoting equity and diversity is also not perceived as a top priority area for professional needs in most systems except Chile for pre-primary settings. In many countries and subnational entities, the proportion of leaders who received training in these areas is below the national or subnational entity average across all professional development topics. These topics, however, are important, as providing a multisectoral approach to children's development and embedding practices that promote equity and diversity in the early years are crucial strategies to mitigate inequalities before they widen (OECD, 2025^[6]) (see Chapter 5).

Some needs vary widely in how frequently they are perceived as a priority across countries, particularly in financial and human resource management. For example, in Ireland, financial management is among the top professional development needs reported by leaders at both levels of ECEC. This is potentially related to the high prevalence of private and for-profit providers, as leaders in such settings may have more managerial responsibilities and therefore need professional development in these areas (Leseman and Slot, 2025^[5]) (see Chapter 3). Despite this, financial management was not frequently covered in recent training activities and novice leaders are more likely to report needs in areas concerning setting management, underscoring the importance of targeted induction and support (Table D.7.4).

Designing the ECEC setting's goals for children's development, well-being and learning has high training coverage in most systems, except in Türkiye, where it is among the top priority needs. Needs for training on using data for quality improvement vary, potentially reflecting differences in resources to implement changes. Access to digital tools and Internet connectivity can also influence these needs, as such resources enable leaders to use data effectively to improve processes (OECD, 2023^[7]) (see Chapter 9).

In response to ECEC leaders' professional development needs, several countries and subnational entities have recently implemented targeted initiatives to strengthen leadership development in ECEC, recognising its role in driving quality improvement and building institutional capacity (Box 7.1).

Table 7.1. Professional development needs of early childhood education and care setting leaders
 Percentage of ECEC leaders who report a “high” or “moderate” level of need for professional development in the following areas

	Knowledge and understanding of new developments in leadership research and theory	Knowledge and understanding of current national/local policies on ECEC	Using data for improving the quality of the ECEC setting	Designing the ECEC setting's goals for children's development, well-being and learning	Knowledge and understanding of research and theories on pedagogy of young children	Using digital resources and tools to facilitate ECEC setting management	Collaborating with parents or guardians	Collaborating with other ECEC settings or primary schools	Collaborating with community services	Observing ECEC staff's practices and ECEC staff-child interactions	Providing effective feedback to ECEC staff	Promoting ECEC staff well-being	Human resource management	Financial management	Promoting equity and diversity
Pre-primary settings (ISCED level 02)															
Chile	67	63	64	61	65	56	48	46	42	58	55	65	61	59	65
Colombia	70	75	77	76	77	85	68	70	82	74	78	69	64	75	59
Denmark	50	38	45	36	40	37	24	18	30	44	57	52	44	35	23
Finland	40	30	34	25	28	39	15	16	43	37	49	57	47	48	40
Flemish Community (Belgium)	39	48	59	56	51	56	29	36	29	47	59	54	42	41	38
Germany*	54	52	55	63	47	56	37	35	37	50	62	67	71	48	50
Ireland*	47	39	42	23	19	40	18	30	35	23	35	41	63	66	26
Israel	48	43	48	51	44	56	39	35	39	38	47	56	44	38	36
Japan	98	99	97	96	94	88	98	96	93	99	97	99	95	87	95
Morocco	77	80	78	78	79	75	64	63	79	68	67	79	67	64	68
Norway*	64	53	60	52	66	30	37	38	41	58	56	61	61	62	51
Spain	68	59	57	53	59	53	40	47	46	53	47	55	50	48	51
Sweden	37	36	38	27	37	33	19	24	39	39	52	51	33	48	30
Türkiye	53	61	57	56	56	51	36	45	44	50	43	45	46	52	35
New Zealand**	48	37	47	26	14	22	19	44	45	16	39	39	47	51	32
Settings for children under age 3															
Flemish Community (Belgium)*	36	47	44	46	45	41	45	34	25	36	55	62	31	21	33
Germany	64	55	56	58	57	61	39	35	39	50	56	71	62	44	44
Ireland*	43	43	41	35	34	46	17	33	40	32	37	50	66	64	33
Israel	55	55	59	61	62	56	50	42	43	61	63	68	55	52	46
New Brunswick (Canada)*	65	52	52	55	57	59	44	47	57	59	58	60	55	51	54
Norway*	72	67	69	51	67	49	42	28	52	55	58	50	58	69	61
Quebec (Canada)*	35	25	30	26	36	31	13	18	27	24	35	34	31	33	22
New Zealand**	50	29	32	33	24	7	19	19	18	24	34	55	48	30	50

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells reflects the within-country ranking of reported professional development needs. In each country, topics most frequently identified by leaders as areas of high or moderate need are shown in darker shades. Topics reported less frequently appear in lighter shades, with white indicating the least frequently reported needs. Intermediate shades represent mid-range frequencies. Grey cells indicate low survey coverage. Percentages are displayed in bold italics when the share of leaders who received recent training on that topic is lower than the country or subnational entity average across all professional development topics. Darker shading without the percentage in bold italics shows alignment between the professional need and coverage in recent training.

ECEC: early childhood education and care.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table Leader.10 and Table D.7.3.

Box 7.1. Professional development strategies to build leadership capacity in early childhood education and care systems

Finland's Towards Evolving Leadership (*Kohti kehittyvää johtajuutta – VEPO 2035*) initiative, commissioned by the Finnish Ministry of Education and Culture and implemented by the University of Helsinki (2021-2023), aims to establish a long-term strategic framework for leadership development across early childhood, pre-primary, primary and lower secondary education through to 2035 (Heikonen et al., 2023^[8]). The project pursued three core objectives: 1) developing a national leadership vision; 2) designing a common leadership curriculum for teacher education institutions; and 3) proposing a sustainable financing model and legal reforms for qualification requirements. Informed by a review of national and international evidence, the project identified four core domains of leadership development: 1) pedagogical leadership; 2) collective leadership; 3) leadership for social justice; and 4) strategic and operational leadership. One of the initiative's key outcomes is the proposal to introduce a nationally co-ordinated initial training framework for early childhood education and care leaders, built on research-informed modules delivered at the university level.

Ireland's Nurturing Skills: The Workforce Plan for Early Learning and Care and School-Age Childcare (2022-2028) sets out a comprehensive strategy to strengthen the ongoing process of professionalisation and the professional recognition of those working in the sector (Ireland's Department of Children, Disability and Equality, 2025^[9]). The plan embeds leadership development within a national career framework and expands professional development opportunities to support both staff and leaders in assuming leadership responsibilities. Building on existing leadership responsibilities, such as the Inclusion Co-ordinator under the Access and Inclusion Model, the plan promotes the creation of new designated leadership roles focused on pedagogy, family and community engagement, and mentoring. Recognising the diverse organisational structures of settings, the plan emphasises flexible leadership models adapted to both small and large settings. Leadership development is further supported through accessible education pathways, career progression opportunities, targeted funding for graduate leaders, and supporting improved pay and conditions through the "Together for Better" funding programme.

New Brunswick's (Canada) Early Childhood Educator Workforce Strategy (2021-2022) recognises that strong leadership is key to sustaining high-quality early learning environments and aims to build leadership capacity within the sector (Government of New Brunswick, 2021^[10]). Through the Emergent Leadership Institute, it offers two development streams: one on pedagogical leadership, supporting educators to deepen curriculum expertise and mentor peers; the other on administrative leadership, strengthening competencies in human resources, financial management and facility operations, with training grounded in relevant legislation. This training is available to both English- and French-speaking sectors. These initiatives are part of a broader effort to professionalise the early childhood workforce, promote leadership from within the sector and create clear pathways for career progression. They laid the groundwork for New Brunswick's Canada-Wide Early Learning and Child Care Action Plan (2021-2026) (Government of New Brunswick, 2024^[11]; Government of New Brunswick, 2022^[12]).

Balancing leaders' autonomy in decision making and their needs for support

Leaders' autonomy over key dimensions of management shapes the organisation and operation of their settings (OECD, 2020^[3]). Two dimensions of autonomy help understand ECEC setting leaders' responsibilities: 1) the level of autonomy for an existing task, which can be full, partial or non-existent; and 2) the scope of autonomy or the extent to which leaders have full autonomy for a range of tasks. Leaders'

levels and scopes of autonomy are highly shaped by institutions (Leseman and Slot, 2025^[5]). At one end of the spectrum, leaders in centralised systems may have limited or no autonomy on a range of tasks, with curriculum, staffing and budgeting decisions governed externally. At the other end of the spectrum, leaders in decentralised or independently managed settings can have full decision-making authority across multiple domains. Between these models lie intermediate arrangements, where leaders can participate in decision making through shared governance or full responsibility in some areas but not others. Shared governance can be effective when public authorities, who retain formal responsibility, provide support that helps leaders align changes with available resources and drive coherent improvement efforts (Douglass, 2019^[11]). As such, meaningful autonomy relies not only on the delegation of formal responsibilities but also on the presence of enabling conditions, such as sufficient resources, clear guidance and access to professional development opportunities, to ensure leaders are well equipped to implement changes (Lunneblad and Garvis, 2017^[13]).

TALIS Starting Strong 2024 gathers data on leaders' responsibilities for core ECEC tasks, their perceived level of decision-making autonomy and the support they need from public authorities. This section explores patterns of leadership autonomy across countries, and different management types between private and public provision, highlighting how institutional features influence leaders' ability to act independently or in collaboration with other actors. It also examines how varying levels of autonomy relate to leaders' reported needs for support from local or national authorities.

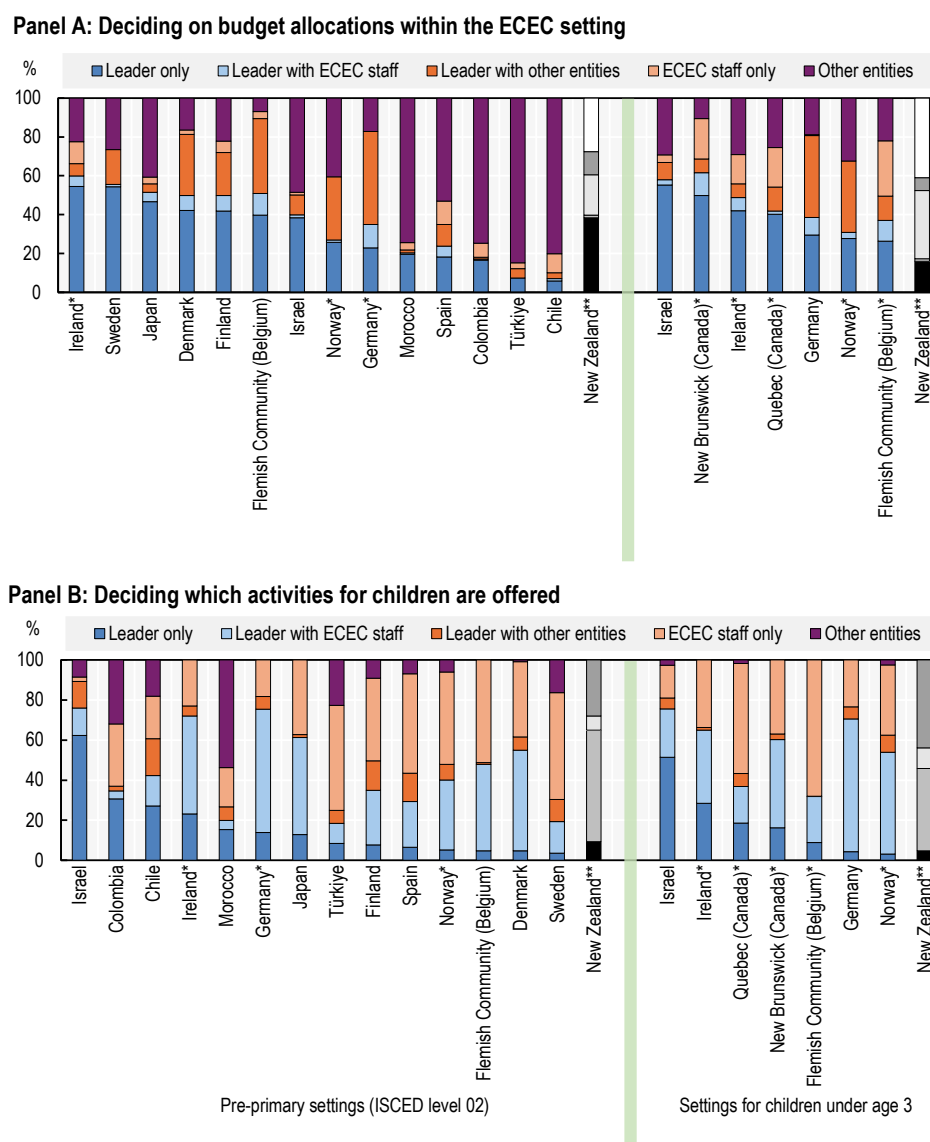
Pedagogical decisions are more commonly shared by leaders and staff while administrative and financial planning often involve external actors

The distribution of leadership responsibilities across governance domains varies across countries, reflecting different institutional designs (Table D.7.5). In pre-primary settings, over 50% of leaders in 7 out of 15 countries and subnational entities report full responsibility for hiring staff. This pattern aligns with budget planning responsibilities in some countries: more than half of leaders in Ireland and Sweden report full responsibility for budgeting as well (Figure 7.3). In contrast, in systems such as Chile, Colombia, Israel, Morocco, Spain and Türkiye, over 60% of leaders report no involvement in hiring staff, and around or more than 50% indicate that budgeting is managed by external actors that involve governing boards or other authorities. Full responsibility for both staffing and budgeting is more frequently reported in settings for children under age 3, where more than 40% of leaders indicate full responsibility for budget planning in Ireland, Israel, and New Brunswick (Canada) and Quebec (Canada). This may reflect not only the more decentralised nature of governance for this age group but also the smaller size of these settings in many systems (see Chapter 3), which may result in broader administrative or financial roles for leaders. Nonetheless, shared governance models are still widespread across both ECEC levels. In Germany, for example, more than 60% of leaders at both levels of ECEC report that administrative decisions, such as staff hiring, involve governing boards or other authorities.

Pedagogical responsibilities, including decision making on daily activities, choosing which materials/toys are used, planning assessments and monitoring children's development are more frequently shared between leaders and staff or managed solely by staff (Figure 7.3). More than 30% of leaders report that staff alone decide on daily activities for children in 9 out of 15 countries and subnational entities at the pre-primary level, and in 6 out of 8 in settings for children under age 3. In systems such as Chile, Colombia and Morocco, external actors play a stronger role, where more than 30% of pre-primary leaders report that governing boards or other authorities are responsible for assessment planning and monitoring. In pre-primary settings in Colombia and Morocco, the same applies to decisions on daily activities. Responsibilities for establishing the curriculum framework vary widely across systems, with several systems where this is mostly decided by governing boards or other authorities (Chile, Colombia, Morocco, Spain and Türkiye for pre-primary education) and others where this is often a shared responsibility between leaders and staff or leaders' full responsibility.

Figure 7.3. Distribution of responsibilities for financial and pedagogical tasks

Percentage of ECEC settings whose leaders report the following people or groups have significant responsibility for the following tasks at their ECEC setting



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: "Significant responsibility" is one where an active role is played in decision making. The "Leader with other entities" category includes cases where the leader reports holding responsibility in addition to an "ECEC setting governing board" and/or a "local, municipality/regional, state or national/federal authority". The "Other entities" category includes cases where the leader reports responsibility is solely with an "ECEC setting governing board" or a "local, municipality/regional, state or national/federal authority", either alone or in addition to "other members of the staff", but without the involvement of the leader.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the average percentage of leaders who reported having full responsibility over a task.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.7.5.

Leaders' autonomy tends to be greater in privately managed ECEC settings

The distribution of leadership responsibilities varies by setting characteristics, such as public or private management, funding source, institutional affiliation, and organisational structure. In pre-primary settings in Colombia, Japan, Morocco, Spain and Türkiye, leaders in privately managed pre-primary settings tend to report greater autonomy in at least one area among administrative, financial and pedagogical responsibilities (Table D.7.6). In Israel, leaders in private settings for children under age 3 report greater autonomy in financial responsibilities. Differences in autonomy also emerge by funding source in a limited number of systems, where some settings receive no government funding. In pre-primary settings in Chile, Morocco and Türkiye and in settings for children under age 3 in Israel, leaders of settings that do not receive government funding report greater autonomy in at least one area of leadership responsibilities than those that receive some form of government funding (Table D.7.7). Furthermore, in Japan, Spain and Türkiye, leaders in chain or network-affiliated pre-primary settings report greater responsibility in appointing or hiring staff, potentially reflecting overlaps with private management structures (Table D.7.8). These differences in the distribution of responsibilities are thus observed in countries where publicly managed settings prevail (Colombia, Spain and Türkiye for pre-primary) but also in those where privately managed settings prevail (Japan for pre-primary and Israel for settings for children under age 3).

Exceptions highlight the complexity of governance arrangements. In Sweden, pre-primary leaders in publicly managed settings report more autonomy over administrative and financial tasks (Table D.7.6). Similarly, in the Flemish Community of Belgium, leaders in settings for children under age 3 report more autonomy over establishing assessment and monitoring plans for children in publicly managed settings. In Morocco, leaders in independent pre-primary settings report greater autonomy than their peers in chain-affiliated settings across all domains (Table D.7.8). In Germany, as in other systems, chain-affiliated leaders report greater autonomy in administrative areas in pre-primary settings, but not in pedagogical ones.

Leaders report a greater need for public support and less influence on important decisions when responsibilities are externally governed

Beyond questions on the distribution of key responsibilities, TALIS Starting Strong 2024 asks leaders whether they consider that they can influence decisions that are important for their work. In 8 out of 15 countries and subnational entities at the pre-primary level and 3 out of 8 countries and subnational entities in settings for children under age 3, more than 25% of leaders report limited influence over decisions important to their work. At the same time, in 10 out of 15 countries and subnational entities at the pre-primary level and 5 out of 8 countries and subnational entities in settings for children under age 3, 60% or more leaders report needing greater support from local, regional or national governments; this figure exceeds 80% in pre-primary settings in Colombia, Japan, Morocco, Spain and Türkiye (Table D.7.9). A pattern emerges in systems where it is possible to compare across different allocations of responsibility: leaders who have less autonomy also report less influence over decisions that are important for their work (Table D.7.10). This pattern is particularly evident in some contexts where administrative, financial or pedagogical responsibilities are held externally, such as in Colombia, Morocco and Türkiye, where pre-primary leaders are significantly less likely to report having influence over decisions when any of the core leadership responsibilities are held by other entities. Similarly, in settings for children under age 3, leaders in Israel report less influence over decisions that are important for their work when budgetary responsibilities are held externally, as do leaders in the Flemish Community of Belgium when they are not responsible for deciding on activities for children.

In systems where governance structures consistently involve leaders in decision making, some nonetheless report lacking influence, suggesting that even within shared governance arrangements, institutional or structural barriers may constrain their ability to drive change. For example, in pre-primary settings in Ireland and Sweden, although most leaders hold significant responsibility in appointing or hiring

staff, more than 30% report feeling unable to influence decisions (Table D.7.10). Moreover, over 70% of leaders in Ireland (at both levels of ECEC) and in Israel in settings for children under age 3 indicate a need for greater support from public authorities (Table D.7.9). By contrast, in pre-primary settings in Denmark, where leaders hold significant responsibility across core areas, very few leaders report lacking such influence.

Promoting distributed leadership practices

Distributed leadership plays an important role in fostering collaboration and shared responsibility in ECEC settings as well as in staff autonomy to shape their practice, all of which can support staff motivation and engagement, ultimately contributing to improved quality in ECEC settings (Douglass et al., 2022^[14]). It involves shared decision making across domains, often through collective goal setting, knowledge exchange, and communication with staff and families. While this approach can strengthen collaboration and empower staff, its effective implementation hinges on leaders' capacity to support staff in their pedagogical learning and daily practice (Douglass and Kirby, 2022^[4]). Without sufficient support, increased autonomy and responsibility may place additional demands on staff and can lead to stress or work overload (Sims et al., 2014^[15]). Structural barriers, such as staff shortages, centralised governance or limited organisational capacity, can further constrain the leader's ability to delegate responsibility and the staff's capacity to engage in leadership roles (Andersen et al., 2017^[16]; Leseman and Slot, 2025^[5]; OECD, 2020^[3]). In this context, professional development opportunities designed to strengthen distributed leadership capacity particularly among leaders are essential. When combined with structural conditions and adequate resources that support leaders' time and ability to help their staff, these opportunities can play an important role in embedding and sustaining distributed leadership practices. In turn, such practices can improve staff working conditions, supporting morale and satisfaction with leadership, all of which contribute to the quality of pedagogical practices in ECEC settings (Kirby et al., 2021^[2]) (see Chapter 8).

TALIS Starting Strong 2024 collects data on whether staff, families and children participate in decision making; whether the setting promotes a culture of mutual support; and whether staff are encouraged to contribute to setting initiatives. This section examines how leadership culture varies across systems and settings. It highlights the role of structural factors such as physical resources (e.g. availability of learning materials, indoor and outdoor space) and human resources (e.g. staff shortages, availability of staff for special tasks), captured through a scale of barriers to structural quality. Organisational characteristics, including setting type and affiliation with a chain or network, are also considered in relation to their capacity to support distributed leadership models. The section further explores how access to professional development opportunities and leader characteristics contribute to shaping distributed leadership practices. Finally, this section examines associations between distributed leadership practices and staff experiences, particularly their satisfaction with the setting's leadership.

Staff have opportunities to participate in decision making, but the involvement of families is more limited

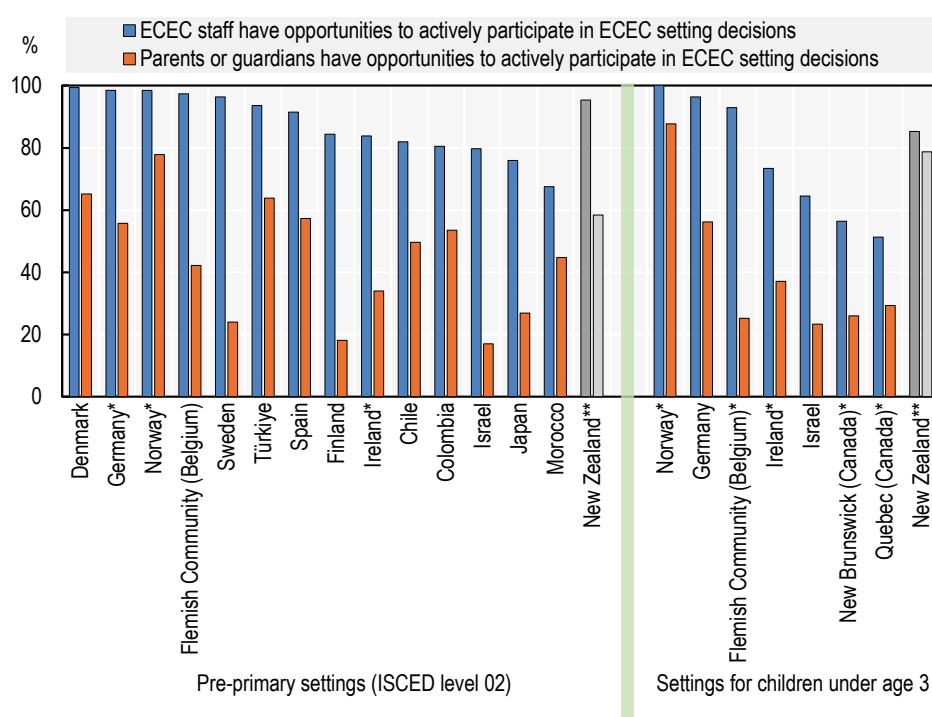
Distributed leadership practices, particularly through collaboration between leaders and staff, are common in ECEC settings across participating countries and subnational entities (Table Leader.41). In nearly all systems, more than 70% of leaders in pre-primary settings report working in a collaborative ECEC setting culture which is characterised by mutual support and where staff are encouraged to lead new initiatives. Similarly, more than 60% of leaders indicate that ECEC staff have frequent opportunities to actively engage in decision making, except in settings for children under age 3 in New Brunswick (Canada) and Quebec (Canada) (Figure 7.4). In most countries and subnational entities, relatively few leaders report making important decisions on their own, although in Denmark, the Flemish Community of Belgium, Israel and Japan, more than 50% of pre-primary leaders report doing so, an exception that also applies to settings

for children under age 3 in Israel. These findings are consistent with large majorities of staff indicating that leaders encourage all staff to have a say in important decisions (Table Staff.44).

In contrast, opportunities for families and children to participate in decision making are limited across many systems. In pre-primary settings, fewer than 30% of leaders in Finland, Israel, Japan and Sweden report that parents or guardians have frequent opportunities to contribute to decisions at the setting level (Figure 7.4). By contrast, more than 60% of leaders in Denmark, Norway and Türkiye report involving families frequently. A similar pattern is evident in settings for children under age 3: fewer than 30% of leaders in the Flemish Community of Belgium, Israel, and New Brunswick (Canada) and Quebec (Canada) report more opportunities for family involvement, compared to over 50% in Germany and over 70% in New Zealand** and Norway. These findings are also consistent with staff reports on family engagement, which show wide variation across countries and subnational entities (see Chapter 5). Children's participation in decision making is more frequently reported in many systems, although with large variations across countries and subnational entities.

Figure 7.4. Staff's and parents' engagement in early childhood education and care setting decisions

Percentage of ECEC settings whose leaders report the following statements hold “quite a bit” or “a lot”



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes:

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the average percentage of leaders who reported ECEC staff have opportunities to actively participate in ECEC setting decisions.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table Leader.41.

Well-resourced settings and targeted professional development can support distributed leadership when aligned with structural conditions

Distributed leadership practices are shaped by governance models, organisational structures and setting size across systems (Table D.7.11). It is more common in publicly managed pre-primary settings in Chile, Denmark, Germany, Spain and Türkiye and in privately managed settings in Sweden, indicating that both public and private governance models can support distributed leadership under different conditions. There are no differences in distributed leadership practices between settings with different management types among settings for children under age 3, potentially because working with younger children may require more frequent collaboration between leaders and staff regardless of the management type.

Staff shortages are associated with lower levels of distributed leadership practices in **pre-primary settings in Denmark, Ireland and Norway** (Table D.7.11). Distributed leadership is less common in larger pre-primary settings in Germany and Japan, and in larger settings for children under age 3 in the Flemish Community of Belgium and Ireland. In settings for children under age 3 in the Flemish Community of Belgium, Germany and Ireland, having fewer staff per child is associated with greater reported distributed leadership. This may reflect the specific context of provision for younger children: such settings are generally smaller and operate with fewer staff than pre-primary settings (see Chapter 3). In some systems, such as the Flemish Community of Belgium, leaders may supervise multiple small settings, where distributed leadership may arise as a practical response to operational demands, with on-site staff assuming greater responsibility, even in the context of limited staffing.

Targeted pedagogical development activities, such as training on new developments in leadership, collaboration with parents or guardians, and providing feedback, are generally associated with stronger distributed leadership, though patterns vary across setting levels and systems (Table D.7.11). Training on new developments in leadership is positively linked to distributed leadership practices among pre-primary leaders in Morocco and Spain while training on collaborating with parents and guardians shows positive associations in pre-primary settings in Colombia, Ireland and Sweden, and in settings for children under age 3 in Norway. Training on providing effective feedback is also linked to stronger distributed leadership in pre-primary settings in Chile and Denmark.

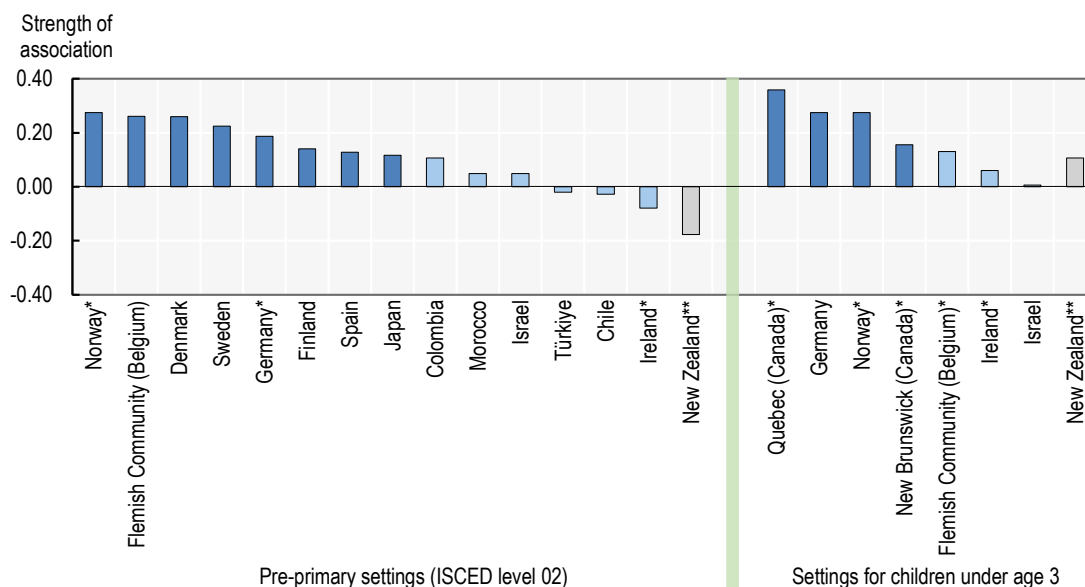
Distributed leadership enhances staff satisfaction with setting leadership and can support broader setting quality

In most systems, distributed leadership practices are associated with higher levels of staff satisfaction with setting leadership (Figure 7.5). This pattern is observed in 8 out of 15 systems at the pre-primary level and in 4 out of 8 systems for children under age 3 (Table D.7.12). Satisfaction with setting leadership can act as a buffer against work-related stress experienced by staff, which is in turn associated with their intentions to leave the sector for physical and mental health issues (see Chapter 8). These findings suggest that distributed leadership may help mitigate stress among staff, thereby supporting staff well-being and contributing to staff retention.

Distributed leadership can also support broader setting quality indirectly by strengthening staff autonomy and well-being. In Colombia, Finland, Israel, Spain, Sweden and Türkiye at the pre-primary level, staff satisfaction with leadership is linked to more frequent engagement in daily adaptive pedagogical practices (Table D.5.4). These practices can enhance the quality of staff-child interactions and foster inclusion by adapting to diverse needs (see Chapter 5). They are also closely related to staff participation in collaborative practices, which can be further strengthened through distributed leadership and leaders' support for pedagogical learning (see Chapter 9).

Figure 7.5. Association between distributed leadership practices and staff satisfaction with setting leadership

Change in the scale of staff satisfaction with setting leadership associated with a one-unit change in the scale of distributed leadership



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: Results show unstandardised coefficients from a multivariable linear regression model. Statistically significant results are indicated in a darker colour, except for New Zealand. For more information, see Annex C.

Countries and subnational entities, except New Zealand, are ranked in descending order of the strength of the association between staff satisfaction with setting leadership and distributed leadership.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.7.12.

StatLink  <https://stat.link/m91x3j>

Cultivating pedagogical and strategic leadership practices to support early childhood education and care quality

ECEC leadership encompasses two main broad functions: administrative and pedagogical. While administrative leadership refers, among others, to tasks related to the management of operations, strategic planning and staff management, pedagogical leadership is the leadership needed to support pedagogical processes through tasks such as promoting the implementation of curriculum and assessment, creating trusting relationships, and supporting the professional growth of staff (Douglass, 2019^[1]). Both types of leadership are important for ECEC quality, although the way in which they work to support quality is contingent upon the context of specific settings and the characteristics of the leaders themselves (OECD, 2020^[3]). For instance, in larger for-profit or corporate chain settings, operational and financial oversight may be prioritised, potentially limiting leaders' focus on pedagogical improvement (Leseman and Slot, 2025^[5]). Likewise, in systems where leaders have limited autonomy, their ability to introduce innovative practices by developing a vision that guides new initiatives and practices at the setting level may be constrained. Higher levels of education and targeted training are associated with stronger engagement in staff support, pedagogical guidance and quality improvement. Limited access to professional learning can hinder such practices (Douglass, 2019^[1]; Kirby et al., 2021^[2]).

TALIS Starting Strong 2024 collects data on leadership practices that can be grouped into two main dimensions of strong leadership: support for staff's pedagogical learning and efforts to foster innovation within ECEC settings. This section presents how such practices vary across different types of settings and leader profiles. It explores how factors such as provider type (e.g. public or private), institutional structure (e.g. affiliation with a chain or network), setting size, and availability of physical (e.g. access to learning materials, indoor and outdoor space) and human resources (e.g. staff shortages, availability of staff for specialised tasks) relate to leadership practices.

Engagement in standard pedagogical leadership practices is widespread, but less so for more strategic practices

Practices that enable leaders to supervise pedagogical practices are widespread across countries and subnational entities (Figure 7.6). In many systems at both levels of ECEC, more than half of leaders report collaborating with staff more than weekly to improve how children play together and observe staff practices and interactions with children, practices that are often linked to pedagogical quality and positive child outcomes (Siraj et al., 2023^[17]) (Table Leader.32). However, there are variations across systems. For instance, fewer than 50% of leaders report observing staff more than weekly in Norway, Sweden and Türkiye at the pre-primary level and in the Flemish Community of Belgium at both levels of ECEC.

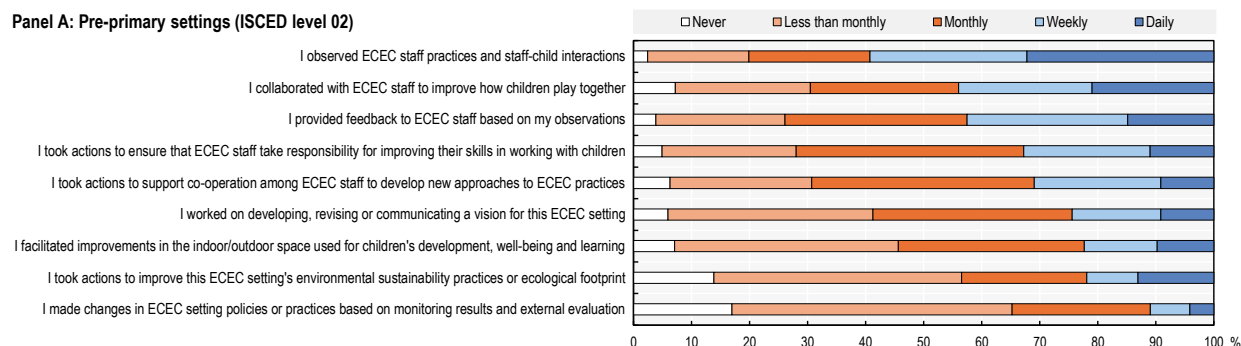
Leadership practices that can help staff improve their practices are less consistently embedded in daily or even weekly routines across ECEC systems (Table Leader.32). For instance, providing feedback based on observations is done less frequently in 6 out of 15 countries and subnational entities at the pre-primary level, and in 2 out of 8 systems for settings for children under age 3, with less than 40% of leaders reporting engaging in this activity weekly or more often (see also Chapter 9). This practice is particularly widespread in Denmark and Israel at the pre-primary level, and in Israel for settings for children under age 3, but less so in the Flemish Community of Belgium at both levels of ECEC and in pre-primary settings in Sweden. Supporting staff collaboration to develop new pedagogical approaches is also reported less frequently across systems, with less than 40% reporting doing so at least weekly in 10 out of 15 countries and subnational entities at the pre-primary level and in 5 out of 8 systems for settings for children under age 3. Exceptions include Denmark (pre-primary), New Zealand** (settings for children under age 3) and Israel (both levels of ECEC).

Engagement in innovative leadership tasks, such as developing or communicating a vision for the ECEC setting, varies across countries and subnational entities. In most systems, more than half of leaders report doing so only monthly or less frequently (Table Leader.32). Higher levels of weekly engagement are observed at the pre-primary level in Chile, Colombia and Spain, in New Zealand** and Quebec (Canada) for settings for children under age 3, and in Israel at both levels of ECEC. In contrast, in settings for children under age 3 in the Flemish Community of Belgium, more frequent engagement in vision-setting is relatively limited, with less than 10% of leaders reporting weekly or more frequent involvement in this area. While strategic planning for innovative practices may not be implemented daily as long-term planning requires reflection and evaluation of the existing practices, their regular implementation is important. Setting a vision can promote a shared understanding of educational goals, fostering staff commitment and enhancing organisational coherence, all of which contribute to the quality of the pedagogical practices in place (Kirby et al., 2021^[2]).

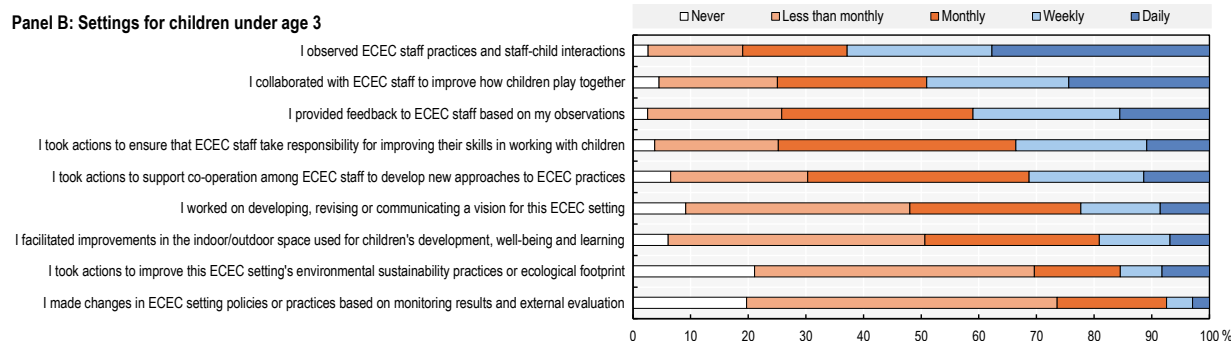
Figure 7.6. Early childhood education and care setting leaders' engagement in different leadership activities

Average percentage of leaders reporting how frequently they engage in the following activities as part of their leadership practice

Panel A: Pre-primary settings (ISCED level 02)



Panel B: Settings for children under age 3



Notes: Averages for pre-primary settings exclude New Zealand. Averages for settings for children under age 3 exclude Israel and New Zealand. ECEC: early childhood education and care.

Activities are ranked in descending order of the average percentage of pre-primary leaders who reported engaging in a leadership activity weekly or daily.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table Leader.32.

StatLink  <https://stat.link/fqg64j>

Professional development that fosters leaders' peer learning and reflective practices is linked to stronger leadership practices

Professional development plays a key role in both dimensions of strong leadership – pedagogical support for staff and efforts to foster innovation (Table D.7.13 and Table D.7.14). Training activities that foster leaders' peer learning and reflective practice are linked to stronger leadership. Planned visits to other settings are associated with greater pedagogical support in pre-primary settings in Japan, Spain and Sweden, and with more innovative practices in pre-primary settings in Spain and in settings for children under age 3 in Germany. In pre-primary settings, participation in professional networks is linked to stronger staff support in Germany, Norway and Türkiye, and to more frequent innovative practices in the Flemish Community of Belgium, Germany and Ireland. Coaching is also a key enabler, showing positive links to support for staff in pre-primary settings in Colombia, Finland and Spain; in settings for children under age 3 in Ireland and the Flemish Community of Belgium; and at both levels of ECEC in Norway. It is also associated with more frequent innovative leadership practices in pre-primary settings in Colombia, Ireland and Japan.

In terms of topics covered in ongoing training, those that target key leadership practices relate to leaders' support for staff and their drive for innovation within ECEC settings (Table D.7.13 and Table D.7.14). For example, training in staff observation is positively linked to pedagogical support in pre-primary settings in Chile, Ireland and Spain, and in settings for children under age 3 in Germany. Similarly, training on providing feedback to staff shows positive associations with support for staff in pre-primary settings in Morocco and settings for children under age 3 in Ireland. Training on using data for quality improvement is linked to innovation in pre-primary settings in Germany and Japan, while training on setting goals is associated with innovative practices in Chile, Finland and Morocco at the pre-primary level and in both levels of ECEC in the Flemish Community of Belgium. Similarly, training on pedagogical theories supports innovation in Morocco at the pre-primary level, and training on equity and diversity is linked to innovation in Spain at the pre-primary level and at both levels of ECEC in the Flemish Community of Belgium.

Leadership practices that support staff's pedagogical learning and promote innovation support greater staff satisfaction with setting leadership

Leadership practices that support staff's pedagogical learning and promote innovation are positively associated with staff satisfaction with setting leadership in several systems (Table D.7.12). In pre-primary settings in Finland and Germany, leaders who provide regular support for staff's pedagogical learning are linked with more favourable staff perceptions of leadership. Similarly, in Denmark, the Flemish Community of Belgium and Sweden, staff in pre-primary settings report higher satisfaction with leadership when leaders frequently introduce innovations within the setting. These effects often occur in the context of distributed leadership, suggesting that a combination of collaborative leadership culture and strong, supportive leadership can improve staff experiences and foster greater commitment to their work and the sector overall.

Policy pointers

- **Support strong leadership through impactful and job-embedded professional development opportunities.** Provide leaders with high-quality, needs-based training that builds capacity to give feedback, guide pedagogical practices and foster innovation. In many systems, frequent participation in professional learning is associated with stronger leadership practices that support staff and improve quality. Collaborative formats such as coaching, peer mentoring and professional networks are particularly effective, with coaching showing positive links to leaders' support for staff's pedagogical learning in several systems, including pre-primary settings in Colombia, Finland and Spain; in settings for children under age 3 in Ireland and the Flemish Community of Belgium; and at both levels of ECEC in Norway.
- **Align leaders' level and scope of autonomy with adequate resources.** In systems where responsibilities are mostly externally governed, leaders report less influence on important decisions and a greater need for public support. Aligning decision-making authority with sufficient resources, training, guidance and opportunities for collaboration with public authorities can help leaders translate responsibilities into meaningful influence over improvement efforts. When this alignment is in place, leaders' formal responsibilities can extend across a greater range of core areas, such as staffing, budgeting and pedagogy, as in Denmark, where broad responsibility is accompanied by relatively few pre-primary leaders reporting a perceived lack of influence over key decisions.
- **Promote distributed leadership to strengthen staff satisfaction and setting quality.** Encourage leadership models that involve staff in decision making and create dedicated roles to support shared responsibilities, adapting strategies to different contexts, including settings for children under age 3, where distributed leadership often emerges in response to organisational structures such as multi-site supervision or smaller teams. Strengthen these practices through

targeted professional development on collaboration, feedback and family engagement, tailored to the characteristics of the settings. Evidence from the Flemish Community of Belgium at the pre-primary level shows that distributed leadership is linked to greater staff satisfaction with leadership, which in turn is associated with staff's child-centred approach to structuring and facilitating learning.

- **Recognise leadership as a key driver of ECEC quality and embed it within broader improvement strategies.** Ensure leadership is systematically supported as part of sector-wide efforts to enhance quality and equity for children and the sustainability of the ECEC workforce. Embed leadership development as a core component of quality assurance, inclusion and workforce strategies that prioritise staff well-being and retention. Focus on building leaders' capacity to foster system-level collaboration and family engagement that strengthens continuity between ECEC settings and home environments and helps mitigate inequalities before they widen. Examples include Finland, Ireland and New Brunswick (Canada), which have introduced professional development models to build leadership capacity for collaboration and system improvement.

References

- Andersen, L. et al. (2017), "Achieving high quality through transformational leadership: A qualitative multilevel analysis of transformational leadership and perceived professional quality", *Public Personnel Management*, Vol. 47/1, pp. 51-72, <https://doi.org/10.1177/0091026017747270>. [16]
- Douglass, A. (2019), "Leadership for quality early childhood education and care", *OECD Education Working Papers*, No. 211, OECD Publishing, Paris, <https://doi.org/10.1787/6e563bae-en>. [1]
- Douglass, A. et al. (2022), *Recognizing and Supporting Early Childhood Educators and Program Administrators as Agents of Change: An Exploration of Distributed Leadership in Early Care and Education*, OPRE Report # 2022-74, Office of Planning, Research, and Evaluation, Administration for Children and Families, US Department of Health and Human Services, Washington, DC, <https://acf.gov/opre/report/recognizing-and-supporting-early-childhood-educators-and-program-administrators-agents>. [14]
- Douglass, A. and G. Kirby (2022), *Evaluating Leadership Development in Early Care and Education*, OPRE Report, Office of Planning, Research, and Evaluation, Administration for Children and Families, US Department of Health and Human Services, Washington, DC, <https://www.mathematica.org/publications/evaluating-leadership-development-in-early-care-and-education>. [4]
- Government of New Brunswick (2024), *Canada-New Brunswick Canada-Wide Early Learning and Child Care Agreement: New Brunswick Action Plan 2023-2026*, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/ELCC/ChildCareActionPlan2023-2026-en.pdf>. [11]
- Government of New Brunswick (2022), *Canada-New Brunswick Canada-Wide Early Learning and Child Care Agreement New Brunswick Action Plan 2021-2023*, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/ELCC/action-plan-2021-2023.pdf>. [12]

- Government of New Brunswick (2021), *Early Childhood Educator Workforce Strategy 2021-2022*, New Brunswick's Department of Education and Early Childhood Development, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/ELCC/early-childhood-educator-workforce-strategy.pdf>. [10]
- Heikonen, L. et al. (2023), *Kohti kehittyvää johtajuutta. Varhaiskasvatuksen sekä esi- ja perusopetuksen johtajuushankkeen (VEPO 2035) loppuraportti*, Finnish Ministry of Education and Culture, Helsinki, https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164596/OKM_2023_7.pdf?sequence=1&isAllowed=y. [8]
- Ireland's Department of Children, Disability and Equality (2025), *Nurturing Skills website*, <https://www.nurturingskills.ie/>. [9]
- Kirby, G. et al. (2021), *Understanding Leadership in Early Care and Education: A Literature Review*, OPRE Report, Office of Planning, Research, and Evaluation, Administration for Children and Families, US Department of Health and Human Services, Washington, DC, <https://acf.gov/opre/report/understanding-leadership-early-care-and-education-literature-review>. [2]
- Leseman, P. and P. Slot (2025), "Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses", *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [5]
- Lunneblad, J. and S. Garvis (2017), "A study of Swedish preschool directors' perspectives on leadership and organization", *Early Child Development and Care*, Vol. 189/6, pp. 938-945, <https://doi.org/10.1080/03004430.2017.1354855>. [13]
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>. [6]
- OECD (2023), *Empowering Young Children in the Digital Age*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/50967622-en>. [7]
- OECD (2020), *Building a High-Quality Early Childhood Education and Care Workforce: Further Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/b90bba3d-en>. [3]
- Sims, M. et al. (2014), "Conceptions of early childhood leadership: Driving new professionalism?", *International Journal of Leadership in Education*, Vol. 18/2, pp. 149-166, <https://doi.org/10.1080/13603124.2014.962101>. [15]
- Siraj, I. et al. (2023), "Improving quality of teaching and child development: A randomised controlled trial of the leadership for learning intervention in preschools", *Frontiers in Psychology*, Vol. 13, <https://doi.org/10.3389/fpsyg.2022.1092284>. [17]

8

Retaining early childhood education and care staff

This chapter discusses the capacity of the early childhood education and care (ECEC) sector to attract and retain a high-quality workforce. It presents a comprehensive set of indicators of ECEC staff professional working conditions, job satisfaction, and emotional and physical well-being. It analyses some of the complex relationships between work demands and aspects of working conditions that help staff meet these demands to better understand their levels of stress and its link with consideration for leaving the role.

Key findings

- **A large majority of ECEC staff and leaders are satisfied with their work at their ECEC setting, with the profession overall and feel valued by parents and children.** In addition, in all systems, a large majority of staff would still choose to work as an ECEC staff if they could decide again.
- **Lower percentages of ECEC staff report feeling valued by society although the perceived social recognition is often higher amongst ECEC staff than in other levels of education.** However, a majority of staff are dissatisfied with their salary. Other aspects of contractual arrangements and their autonomy to shape their practice are sources of job satisfaction for staff.
- **Among various types of resource shortages, ECEC leaders consider insufficient human resources to be the main hindrance to the quality of the ECEC environment.** Staff absences hinder the provision of quality ECEC in more than 50% of settings in Denmark (pre-primary settings), Germany and Norway (both levels of ECEC), and Ireland and New Brunswick (Canada) (settings for children under age 3).
- **Staff's levels of stress vary widely across countries, but in most systems only a small majority of staff consider that the job leaves time for their personal life, particularly in countries where staff report long working hours.** Physical health consequences of the job are reported slightly more than mental health ones, but the two are highly correlated.
- **Among the main broad categories of ECEC staff stress, lack of capacity, resources and time has the strongest link with staff's levels of stress.** Having too many tasks to perform at the same time is one of the most common sources of stress reported by staff in all countries and subnational entities while having extra duties due to absent ECEC staff is a frequent source of stress in settings for children under age 3. Accommodating children with special education needs is a major source of stress for pre-primary staff but somewhat less so for staff working with children under age 3.
- **Attending to family responsibilities and working in a different job not in the ECEC sector are the most likely reasons for staff to consider leaving their role in most countries and subnational entities.** Attending to family responsibilities highlights the likelihood of temporary absences among ECEC staff, while working in a different job in another sector reflects considerations for leaving the sector permanently. Resolving physical or mental health issues are also likely reasons to consider leaving the profession. The small percentage of staff indicating that becoming an ECEC setting leader is a likely reason to leave the ECEC staff role might reflect a lack of career progression opportunities.
- **Staff who experience more stress are more likely to consider leaving their ECEC staff role, particularly for mental health issues, but also for physical ones.** Staff who report lower levels of stress and greater satisfaction with work at the ECEC setting, and to some extent with their salary, are less likely to consider leaving their role.
- **Feelings of stress emerge from imbalances between job demands, resources to address them and rewards for effort.** Autonomy and satisfaction with salary and leadership are key resources that buffer staff from stress. Collaborative practices do not appear to be a key buffer, which suggests that they are not sufficiently developed or targeted. However, multitasking and a higher share of vulnerable children in the group are linked to higher levels of staff stress in several systems, even after accounting for a range of job resources. These findings suggest that job demands are too high, or job resources insufficient, to buffer against stress in these systems.

Attracting and retaining motivated and competent staff is central to building strong ECEC systems. Well-resourced ECEC systems contribute to reducing work overload and preventing sick leave among staff while meeting the demand for places in ECEC settings (Leseman and Slot, 2025^[1]). High staff turnover can harm the quality of ECEC children receive by undermining safe attachments and organisational stability (Hamre and Pianta, 2005^[2]). A lack of qualified staff makes it difficult to maintain adequate staff-to-child ratios that support individualised and rich interactions between staff and children and can lead to safety concerns. However, staff shortages are one of the main challenges of the ECEC sector in most OECD countries (OECD, 2019^[3]; European Commission: Directorate-General for Education, Youth, Sport and Culture, 2023^[4]). Trying to limit staff shortages through the recruitment of less qualified staff or of temporary staff can lower the quality of the learning environment. Addressing staff shortages, therefore, requires addressing the sources of these shortages.

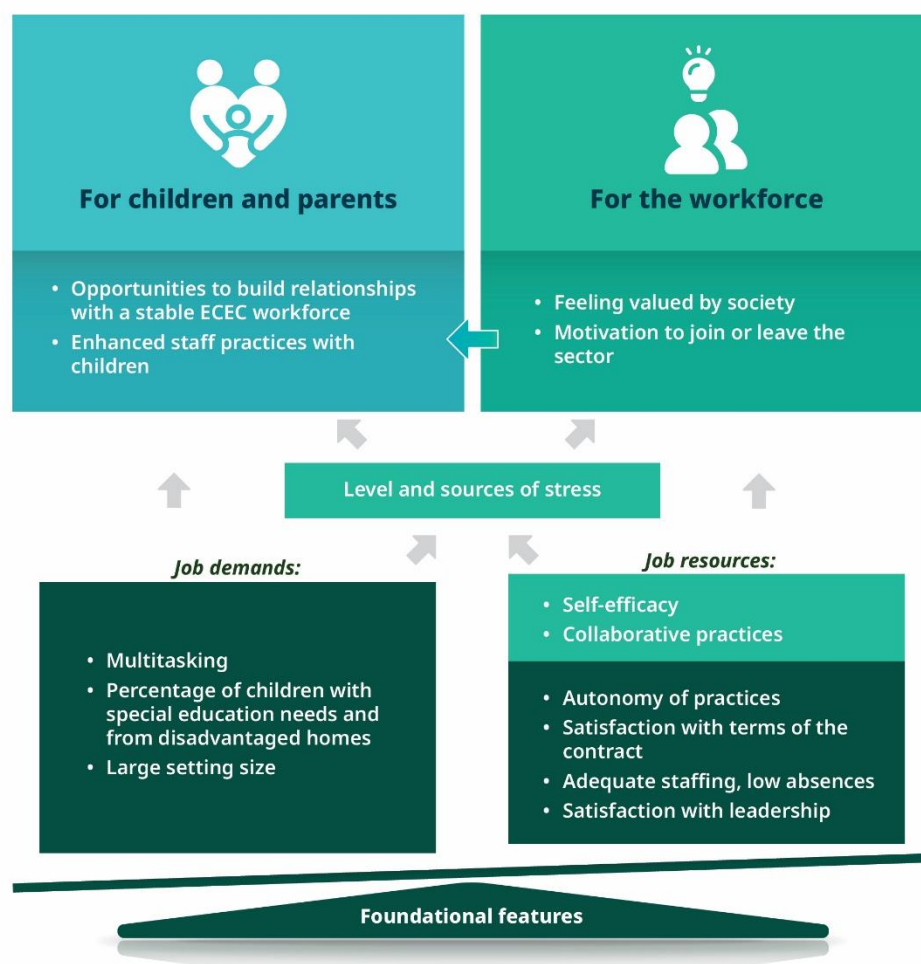
Working conditions and well-being as well as the status of the ECEC profession are key determinants of the sector's capacity to attract and retain good candidates and deliver high-quality education and care (OECD, 2020^[5]; Cumming, 2016^[6]). There are deep and interactive relationships between job demands and resources, employees' stress, physical and emotional health, and individuals' motivations to leave the profession (OECD, 2020^[5]; Heilala et al., 2021^[7]).

The Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024 offers unique information on a comprehensive set of indicators of the job satisfaction and emotional and physical well-being of ECEC professionals in the participating countries and subnational entities. It includes information on many aspects of the ECEC workforce's working conditions as well as on what leaders perceive to be hindrances to providing high-quality environments, various sources of work-related stress and possible reasons for staff to leave their role. This chapter presents an overview of these indicators to draw an overall picture of the capacity of ECEC systems to attract and retain a high-quality workforce. It also analyses some of the complex relationships between work demands and aspects of working conditions that help staff meet these demands to better understand their levels of stress and its link with consideration for leaving the role.

The chapter addresses the following questions:

- To what extent do ECEC setting leaders perceive staff shortages as being a hindrance to the quality of the ECEC environment?
- Which aspects of the ECEC profession lead to job satisfaction or dissatisfaction? What are the main sources of stress?
- What are the main reasons for staff to potentially leave the role? How do these reasons relate to working conditions and stress?
- Which factors can exacerbate stress or buffer against high demands in ECEC jobs?

Figure 8.1. Analytical framework for building strong early childhood education and care by attracting and retaining staff in the sector



Raising the attractiveness of the early childhood education and care profession

Addressing staff shortages by raising the attractiveness of careers in the ECEC sector is a key priority. The prestige or social status of the ECEC profession plays an important role in attracting new candidates to the profession (Hughes et al., 2024^[8]). This partly relates to the level of public investment in the sector, which reflects the extent to which societies perceive ECEC, and therefore its staff, as contributing to the public good (Leseman and Slot, 2025^[11]). In addition, the social status and decisions to enter the sector are closely related to education requirements to enter the profession and working conditions such as salaries, other terms of the employment contract, level of autonomy and opportunities for career progression. While working with young children and families can provide intrinsic rewards, the ECEC sector is generally known to propose relatively low salaries compared to higher levels of education or jobs requiring a similar level of education and training (OECD, 2025^[9]; 2024^[10]).

While TALIS Starting Strong 2024 does not directly measure staff shortages, it asks ECEC setting leaders about the factors that hinder the capacity to provide a quality environment for children's development,

well-being and learning. This provides information on the extent to which different types of staff shortages represent structural barriers to ECEC quality. TALIS Starting Strong 2024 also asks ECEC staff and leaders their views on a range of factors that are closely related to the attractiveness of the profession. This section presents leaders' views about staff shortages as well as staff's and leaders' perceptions of the social status of their profession; their job satisfaction; and their views on major aspects of their working conditions such as salary, other terms of the employment contract, autonomy in job practices and the quality of the working environment at their ECEC settings.

Staff absences and lack of staff working with children with special education needs are generally perceived as hindering the provision of high-quality environments for children

Leaders generally consider different types of staff shortages (Table 8.1) to be the main hinderance to their settings providing a high-quality environment for children's development, well-being and learning (Table Leader.42). Staff absences hinder the provision of quality ECEC in more than 50% of settings in Denmark (pre-primary settings), Germany and Norway (at both levels of ECEC) and in Ireland and New Brunswick (Canada) (in settings for children under age 3) (Table D.8.1). Shortages of qualified staff or an insufficient number of staff for the number of children enrolled hinder the provision of quality ECEC in more than 50% of settings for both levels of ECEC in Germany and for children under age 3 in Ireland, Norway and Quebec (Canada) (Table D.8.1). In contrast, fewer setting leaders report staff shortages in settings for children under age 3 in the Flemish Community of Belgium and in pre-primary settings in Spain. In addition to staff shortages, leaders also widely report other challenges, such as changes in available funding, in many systems.

Among the various types of inadequacies of human resources, staff absences are the most prevalent in almost all countries and subnational entities, particularly in settings for children under age 3 (Table 8.1). A shortage of staff with competencies in working with children with special education needs is the main staff shortage concern in Colombia, the Flemish Community of Belgium, Japan and Morocco at the pre-primary level. A shortage of qualified staff is the main staff shortage concern in Israel and Ireland at both levels of ECEC; in Türkiye in pre-primary settings; and in Quebec (Canada) in settings for children under age 3.

Table 8.1. Staff shortages hindering early childhood education and care settings' capacity to provide a quality environment for children

Percentage of ECEC settings whose leaders report that the following issues hinder their ECEC setting's capacity to provide a quality environment for the development, well-being and learning of children

	ECEC staff absences	Shortage of ECEC staff with competence in working with children from socio-economically disadvantaged homes	Shortage of ECEC staff with competence in working with children with special education needs	Shortage of ECEC staff with competence in working with children speaking another language	Shortage of qualified staff	Shortage of staff for the number of enrolled children
Pre-primary settings (ISCED level 02)						
Chile	41	21	39	25	20	21
Colombia	34	42	49	28	35	26
Denmark	57	26	39	23	25	38
Finland	38	13	26	11	30	3
Flemish Community (Belgium)	33	17	35	28	20	29
Germany*	77	26	45	34	31	53
Ireland*	32	22	26	29	45	24
Israel	29	26	38	23	39	35
Japan	19	8	36	12	27	18
Morocco	22	38	51	26	32	18
Norway*	57	22	24	38	24	37
Spain	14	14	23	25	11	28
Sweden	32	8	10	17	9	6
Türkiye	36	41	41	36	47	45
<i>New Zealand**</i>	21	8	17	10	11	7
Settings for children under age 3						
Flemish Community (Belgium)*	27	8	11	9	13	13
Germany	77	23	40	26	26	52
Ireland*	55	32	37	41	60	37
Israel	37	21	26	17	40	29
New Brunswick (Canada)*	52	29	43	23	43	13
Norway*	53	22	30	24	22	54
Quebec (Canada)*	39	31	48	19	53	15
<i>New Zealand**</i>	40	13	30	10	11	11

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes:

Home-based settings are not included.

ECEC: early childhood education and care.

The shading of the cells applies horizontally to the ranking of staff shortages hindering ECEC settings' capacity to provide a quality environment for children. Within each country or subnational entity, the most frequently areas of staff shortages reported by leaders to hinder the quality of the environment are indicated in darker shades. The least frequently reported areas of shortages are indicated in white. Areas of staff shortages reported by intermediate percentages of leaders are indicated in intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.8.1.

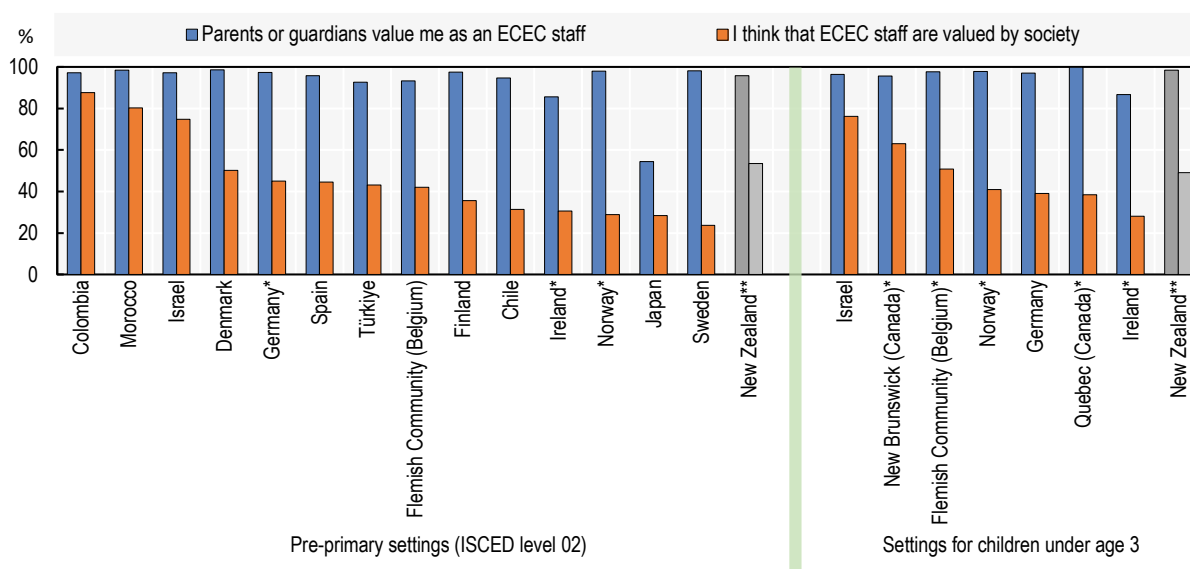
StatLink  <https://stat.link/em6rb3>

ECEC staff feel highly valued by parents and children but less so by society

For both levels of ECEC, more than 80% of ECEC staff in all countries except Japan feel valued by parents or guardians (Figure 8.2). Likewise, except in Japan, close to 100% of staff feel valued by children (Table D.8.2). The percentages of staff who feel valued by society are lower, reaching less than a third of staff in pre-primary settings in Chile, Japan, Norway and Sweden as well as in Ireland for both levels of ECEC. ECEC staff who feel less valued by society tend to have more than three years of experience (Table D.8.3) and higher educational qualifications (Table D.8.4). Leaders' views on ECEC staff being valued by society align with the staff's views (Table Leader.43). These findings point towards a mixed perception of the social status of the profession by staff themselves, with staff feeling valued by the users of ECEC services but less so by society as a whole, which might deter new candidates from joining the profession. There are, however, exceptions: more than 70% of staff in pre-primary settings in Colombia and Morocco and at both levels of ECEC in Israel feel valued by society. In settings for children under 3 in New Brunswick (Canada), this is the case for more than 60% of staff. Furthermore, in most ECEC systems, the percentages of ECEC staff who feel valued by society are much higher than amongst staff working in other levels of education (OECD, 2025^[11]).

Figure 8.2. Early childhood education and care staff's feeling of being valued by society and by parents or guardians

Percentage of ECEC staff who “agree” or “strongly agree” with the following statements



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the percentage of staff who feel valued in society.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.8.2.

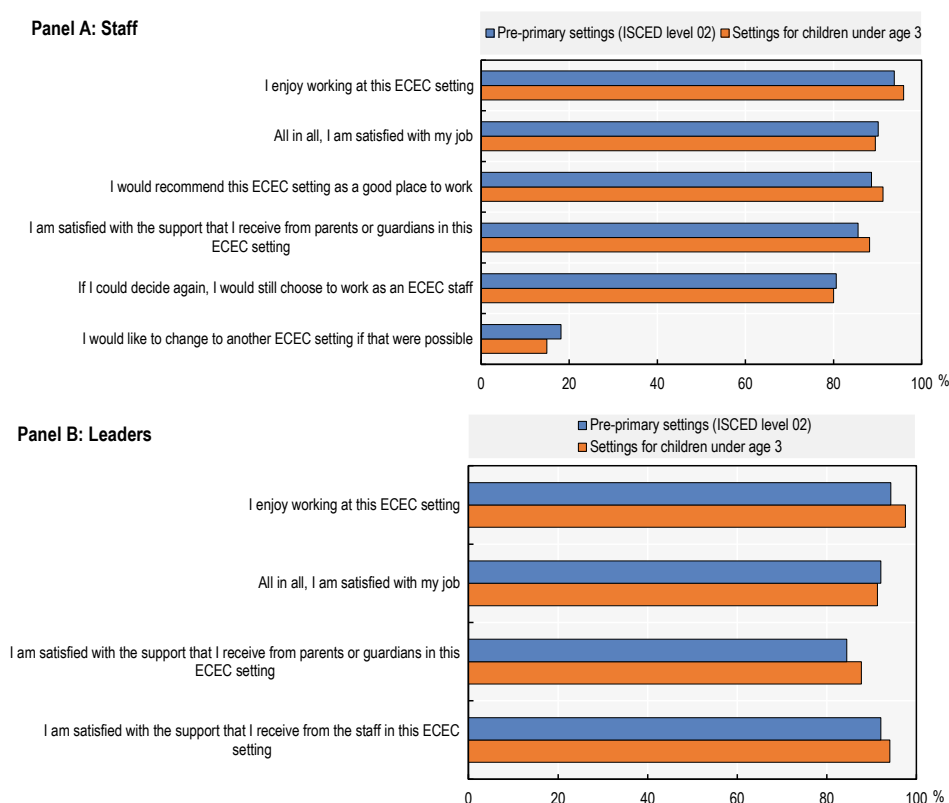
StatLink  <https://stat.link/jvbi0r>

A large majority of ECEC staff and leaders are satisfied with the profession and their work at their ECEC setting

Overall job satisfaction is high, with more than 80% of staff and leaders agreeing with the statement “All in all, I am satisfied with my job” in all countries and subnational entities except Ireland (both levels of ECEC) and Japan (pre-primary settings). Staff with higher levels of education are less satisfied with the job in pre-primary settings in Chile, Denmark, Germany and Sweden and in settings for children under age 3 in Ireland (Table D.8.4). Consistent with overall high satisfaction with the job, large majorities of staff report that if they could decide again, they would still choose to work as an ECEC staff (Figure 8.3), particularly for assistants and staff with lower levels of education and less experience.

Figure 8.3. Satisfaction with the job and work at early childhood education and care settings

Average percentage of staff and leaders who “agree” or “strongly agree” with the following statements:



Notes:

ECEC: early childhood education and care.

Averages exclude New Zealand.

Staff responses are from the staff questionnaire and from leaders with staff duties and in one-person settings. Leader responses are from leaders without staff duties, with staff duties and in one-person settings. Answers from leaders with staff duties and in one-person settings are, therefore, included in both Panels A and B. Not all items were asked to both staff and leaders.

Statements are ranked in descending order of the average percentage of pre-primary staff who “agree” or “strongly agree” with the statement.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.8.2 and Leader.43.

StatLink  <https://stat.link/f9ner0>

The day-to-day working environment that staff experience in their ECEC setting also matters for their job satisfaction and well-being. On average across countries and subnational entities for both levels of ECEC, more than 80% of staff report that they enjoy working at their ECEC setting and would recommend their ECEC setting as a good place to work (see Figure 8.3). Leaders also report high satisfaction with working

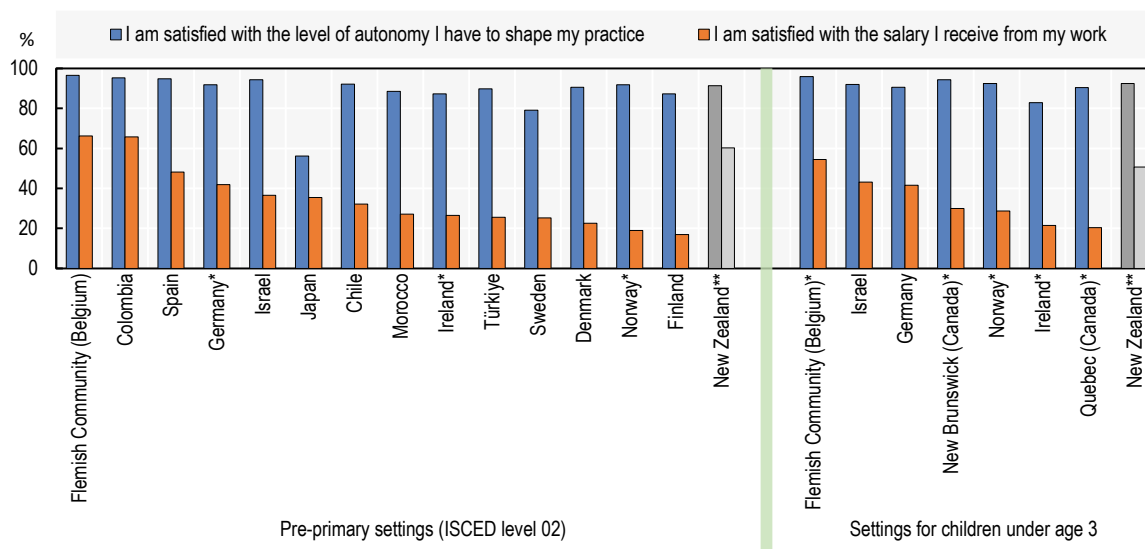
at the ECEC setting. However, more than 20% of staff report that they would like to change ECEC setting if it was possible in Chile, Colombia, Japan, Morocco and Türkiye at the pre-primary level and in Ireland and New Brunswick (Canada) in settings for children under age 3. This is also more likely to be the case among pre-primary staff with higher levels of education (ISCED 6 and above) compared to staff with lower levels of education (ISCED 3 or below) in Chile, Denmark and Germany (Table D.8.4).

A majority of staff are dissatisfied with their salary but satisfied with other contractual terms and autonomy in practice

In all countries and subnational entities except Colombia (pre-primary settings) and the Flemish Community of Belgium and New Zealand** (at both levels of ECEC), a majority of ECEC staff report being dissatisfied with their salary (Table 8.4). Teachers and assistants are equally likely to report dissatisfaction with their salary, except in pre-primary settings in Denmark, where assistants are more satisfied, and in pre-primary settings in Sweden and settings for children under age 3 in Israel, where teachers are more satisfied. Dissatisfaction with salary tends to grow with experience and level of education (Tables D.8.3 and D.8.4), suggesting a lack of career and salary progression in many ECEC systems. However, in a couple of countries and subnational entities, mostly for pre-primary education, the private sector seems to better align salaries with expectations, with staff being more satisfied with their salary in this part of the sector (Table D.8.5).

Figure 8.4. Early childhood education and care staff satisfaction with salary and level of autonomy

Percentage of staff who “agree” or “strongly agree” with the following statements



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Countries and subnational entities, except New Zealand, are ranked in descending order of the percentage of staff who are satisfied with their salary.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.8.2.

StatLink  <https://stat.link/3sthek>

Salary is only one aspect of the working conditions. Other contractual terms determine job security, which is another important reward for staff's work. In all countries and subnational entities except for staff in pre-primary settings in Türkiye, a majority of ECEC staff are satisfied with the other terms of their contract.

Assistants tend to be equally or more satisfied with the other terms of their contract than teachers (Table D.8.2). As with satisfaction with their salary, less experienced and less qualified staff also tend to be more satisfied with the terms of their contract (Tables D.8.3 and D.8.4). In pre-primary settings in Denmark, Morocco, Sweden and Türkiye and settings for children under age 3 in Israel, a larger proportion of staff in the private sector (non-profit and for-profit) are satisfied with the terms of their contract than staff in the public sector (Table D.8.5). These are also systems where staff in the private sector are more satisfied with their salary than staff in the public sector. Pre-primary staff in Colombia, the Flemish Community of Belgium and Spain and those in settings for children under age 3 in Israel who voluntarily work part time are more satisfied with other terms of their contract than those working involuntarily part time (Table D.8.6).

Having some autonomy at work and control over decisions is important to face demanding situations and a heavy workload and can promote job satisfaction. Across countries and subnational entities, a large majority of staff are satisfied with the level of autonomy they have to shape their practices (Table 8.4). This is consistent with leaders indicating that pedagogical responsibilities such as decision making on daily activities, choosing which materials/toys are used, and planning assessments and monitoring children's development are frequently shared between leaders and staff or managed by staff only (see Chapter 7).

Staff who are satisfied with their working conditions are more likely to feel valued by society

In most countries and subnational entities and for both pre-primary settings and settings for children under age 3, ECEC staff who are satisfied with their salary, with the terms of their contract and, to some extent, with their level of autonomy are more likely to feel valued by society (Table D.8.7). Salaries, contractual terms and autonomy in staff practices are aspects of working conditions that relate to the organisation and governance of the ECEC sector and can therefore contribute to the social status of the profession. They are also factors that can be changed by policies. Among the countries where percentages of staff perceiving a low prestige of the profession are the highest (Chile, Ireland, Japan, Norway and Sweden), staff who are more satisfied with their salary are also more likely to feel valued by society (in Norway this holds for settings for children under age 3 only), while in Japan and Sweden for pre-primary settings and Norway for settings for children under the age of 3, there is also a positive relationship with satisfaction with the level of autonomy. In several systems, the perceived prestige of the profession is higher when there are more staff per child in the target group, suggesting staff may feel more valued when they have sufficient resources to support their work with children.

Lack of physical resources adds to insufficient staff resources

Changes in available funding is another main hinderance to providing a quality environment for children, according to leaders in many systems (Table Leader.42). In some countries (Chile, Colombia and Türkiye for pre-primary), a lack or inadequacy of physical resources such as play and learning materials, indoor and outdoor spaces, and utilities further add to the lack of human resources in settings' capacity to provide high-quality ECEC. In pre-primary settings in Morocco, inadequate physical resources is a bigger impediment to the provision of high-quality ECEC than inadequate human resources. In other countries and subnational entities, the lack or inadequacy of physical resources is a more limited issue.

When the various hindrances to providing quality ECEC are combined to look at these two main categories – the inadequacies of human and physical resources – in nearly all pre-primary systems, the greater the inadequacy of physical resources, the greater the inadequacy of human resources (Table D.8.8; due to data availability, this analysis cannot be done for settings for children under age 3). This finding points to the accumulation of insufficient resources in some ECEC settings and the need to consider staff shortages and their implications on the capacity of ECEC settings to provide high-quality experiences to the children they serve, not in isolation, but together with broader resource issues. Some

countries have developed public funding schemes that put a particular focus on better aligning salaries with qualifications to attract and retain high-quality staff as part of a broader funding package for quality and equity in ECEC (Box 8.1).

Box 8.1. Policies to raise the status of the early childhood education and care profession and attract candidates to the sector

Developing consistent policies to raise the status of the early childhood education and care (ECEC) profession can be particularly difficult when many responsibilities are at the subnational level of government or when a large share of settings are privately managed and the government has limited levers to influence wages.

In Germany, where ECEC responsibilities lie with the federal states, the national government has introduced a law including bilateral agreements with states for measures subsidised by the national government to initiate a common quality framework in ECEC, with a mandatory focus on workforce issues. In particular, states have strengthened the practical component in the vocational education and training programme to become an ECEC teacher by almost equalising training and lessons hours. The practical component takes place in ECEC centres, is remunerated, and includes supervision and coaching to support skills development. As part of the bilateral agreements, states can also receive national funding to develop additional training for existing and already trained ECEC staff (German Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth, n.d.^[12]).

In New Zealand, ECEC settings are privately managed. There used to be large variations across settings in staff and leaders' salaries and qualifications. Now, the Ministry of Education allocates funding to ECEC settings with a rate for the subsidy that depends on a range of criteria, including the percentage of certificated teachers, their levels of qualification and the adoption of the "certificated teacher pay levels". The certificated teacher pay levels are minimum salary scales and salary progressions for teachers; applying these scales gives ECEC settings the right to receive funding from the ministry. Salary scales depend on the qualification, roles and experience of staff and leaders. The policy has led to a better alignment of wages with experience, qualifications and roles, while also raising the share of certificated teachers in ECEC settings (New Zealand Ministry of Education, 2024^[13]).

Understanding the level and sources of stress in early childhood education and care settings

Working in ECEC is generally considered to be intrinsically rewarding, as reflected by high levels of job satisfaction in all participating countries and subnational entities, but to also be emotionally and physically demanding (Heilala et al., 2021^[7]). Physical demands in the ECEC job are known to be frequent, particularly for staff working with the youngest children, including, for instance, lifting and carrying children. Low emotional well-being such as stress and mental health issues and physical health problems related to work are of particular concern, as they can lead to disengagement with the work and lower quality interactions with children.

TALIS Starting Strong provides a rich set of indicators on emotional and physical well-being, including the level of stress that staff and leaders experience in their work, whether the job negatively impacts their mental and physical health, and which aspects of the job are sources of stress. This section presents this information.

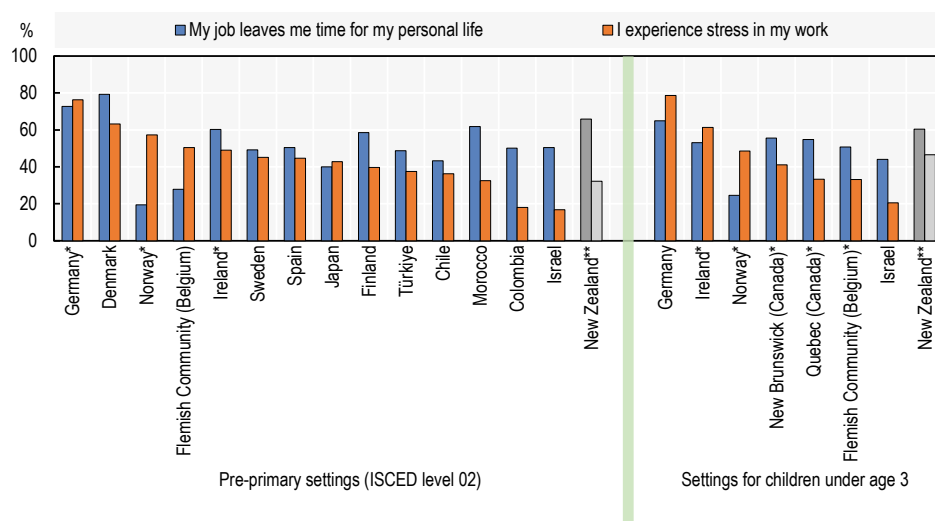
Staff's levels of stress vary widely across systems, but only a small majority of staff consider that the job leaves time for their personal life

Across systems, percentages of staff who report experiencing stress in their work are the lowest in pre-primary settings in Colombia and Israel (with less than 20%), the highest in Germany for both levels of ECEC (more than 75%), and around 40% in several countries and subnational entities (Figure 8.5). In most countries and subnational entities, large percentages of leaders also report experiencing stress at work, ranging again from around 20% in Colombia (pre-primary) to more than 80% in Germany (both levels of ECEC) (Table Leader.44). There are also large variations in the percentages of staff reporting that their job leaves them time for their personal life, but in some countries and subnational entities, this is the case for a minority of staff. In pre-primary settings in Chile, Colombia and Japan, and in those for children under age 3 in the Flemish Community of Belgium and New Brunswick (Canada), large percentages of staff indicate not having time for their personal life while average working hours are long (see Chapter 4). In several countries and subnational entities, staff who work part time are more likely than those working full time to report that the job leaves time for their personal life and less likely to report experiencing stress (Table D.8.9). However, countries and subnational entities with high shares of staff reporting that their job leaves time for their personal life are not necessarily those that have low shares of staff who experience stress in their work. For instance, Germany has the highest percentages of staff reporting stress in both levels of ECEC, but also among the highest percentages of staff reporting having time for their personal life, which underlies that the number of working hours is only one of the drivers of stress.

TALIS Starting Strong 2024 also asks ECEC staff whether their job negatively impacts their mental and physical health. In one group of countries and subnational entities, less than 20% of staff report adverse impacts on health, but percentages are above 30% in Denmark (pre-primary) and Germany (both levels of ECEC), as well as in Ireland for the impact on their mental health in settings for children under age 3. Reporting physical health consequences is slightly more common than reporting mental health consequences but the two are highly correlated (Table D.8.10). This is consistent with evidence that ECEC staff tend to experience challenges in both psychological and physical well-being simultaneously (Kwon et al., 2021^[14]).

Figure 8.5. Work stress and impact on personal life for staff in early childhood education and care settings

Percentage of ECEC staff who report that the following statements apply “quite a bit” or “a lot”



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Countries and subnational entities, except New Zealand, are ranked in descending order of the percentages of staff who report that the job leaves time for personal life “quite a bit” or “a lot”.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.8.11.

StatLink <https://stat.link/at9vjp>

Main sources of stress relate to lack of capacity, resources and time as well as aspects of the work that are specific to children’s development, well-being and learning

Lack of capacity, resources and time is an important source of stress. In all participating countries and subnational entities except Colombia, Morocco and New Zealand** in pre-primary settings and Israel for both levels of ECEC, having too many tasks to do at the same time is among the most frequently reported sources of stress by ECEC staff (Table 8.2). In settings for children under age 3, having extra duties due to absent ECEC staff is a main source of stress except in Israel. At the pre-primary level, this is also the case in Denmark, Finland, Germany, Norway and Sweden. Having too much work related to documenting children’s development or too much administrative work are also highly frequent sources of stress. These findings point towards heavy workloads and multitasking being stressful working conditions. As staff who spend more time on documenting children’s development are also more likely to frequently engage in practices that support children’s development (see Chapter 4 and Tables D.5.3 and D.5.4), reserving time for these activities seems important, particularly for teachers who are more likely than assistants to report this task being a source of stress (Table D.8.12).

Several aspects of the work specific to children’s development, well-being and learning are also major sources of stress. Accommodating children with special education needs is a widely reported source of stress for pre-primary staff in most countries, but somewhat less so for staff working with children under age 3, except in Quebec (Canada). Managing classroom/playgroup/group behaviour is also a frequent source of stress for large percentages of staff in most countries and subnational entities. Having too many children in the group is the main source of stress in Norway (both levels of ECEC) and Sweden (pre-primary).

Table 8.2. Sources of stress for early childhood education and care staff

Percentage of staff who report that the following is “quite a bit” or “a lot” a source of stress

	Aspects related to capacity, resources and time								Aspects specific to children’s development, well-being and learning				
	Having too much administrative work to do	Having extra duties due to absent ECEC staff	Addressing parent or guardian concerns	Having too many tasks to do at the same time	Lacking resources	Having too much preparation work for children’s activities	Having too much work related to documenting children’s development	Lacking technical skills for the use of digital resources and tools	Being held responsible for children’s development, well-being and learning	Managing classroom/ playgroup/ group behaviour	Accommodating children with special education needs	Having too many children in my classroom/ playgroup/ group	Having to adapt my practices with children due to unexpected disruptions
Pre-primary settings (ISCED level 02)													
Chile	35	37	34	37	40	29	34	17	36	35	43	32	19
Colombia	23	18	29	21	37	17	23	24	36	31	24	24	24
Denmark	40	68	31	64	44	22	43	17	37	57	60	57	18
Finland	37	50	18	39	32	15	31	16	28	41	51	32	6
Flemish Community (Belgium)	69	42	32	61	29	40	64	18	27	25	57	51	8
Germany*	43	74	43	74	34	23	60	31	43	47	51	51	26
Ireland*	49	41	31	43	34	29	49	19	37	42	36	27	15
Israel	31	22	42	42	35	30	32	25	44	57	42	52	34
Japan	47	25	47	52	29	30	37	32	48	39	45	20	35
Morocco	45	22	31	44	54	60	51	41	60	63	40	36	33
Norway*	27	61	17	57	38	22	28	15	26	48	34	64	11
Spain	64	14	43	60	40	45	58	21	39	45	48	51	22
Sweden	42	58	28	53	43	50	57	13	35	49	50	61	10
Türkiye	61	31	60	67	53	54	69	25	53	50	45	54	43
New Zealand**	36	32	26	35	20	15	36	12	27	39	48	22	10
Settings for children under age 3													
Flemish Community (Belgium)*	37	43	27	44	19	26	36	10	26	26	19	35	6
Germany	44	77	41	73	36	26	62	29	41	42	42	52	24
Ireland*	56	56	41	57	40	33	55	24	44	53	39	39	22
Israel	11	28	40	28	18	19	20	12	40	45	23	25	20
New Brunswick (Canada)*	23	41	34	39	27	27	31	13	33	35	30	21	17
Norway*	28	60	24	53	38	20	23	17	26	37	30	63	12
Quebec (Canada)*	23	41	31	40	35	21	34	9	33	33	45	39	16
New Zealand**	33	51	25	49	20	17	45	13	27	43	40	32	12

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: ECEC: early childhood education and care.

Within each country and subnational entity, areas of sources of stress reported by the largest percentages of staff are indicated in darker shades and those reported by the smallest percentages of staff are indicated in white. Sources of stress reported by intermediate percentages of staff are indicated in intermediate shades. Grey indicates low survey coverage.

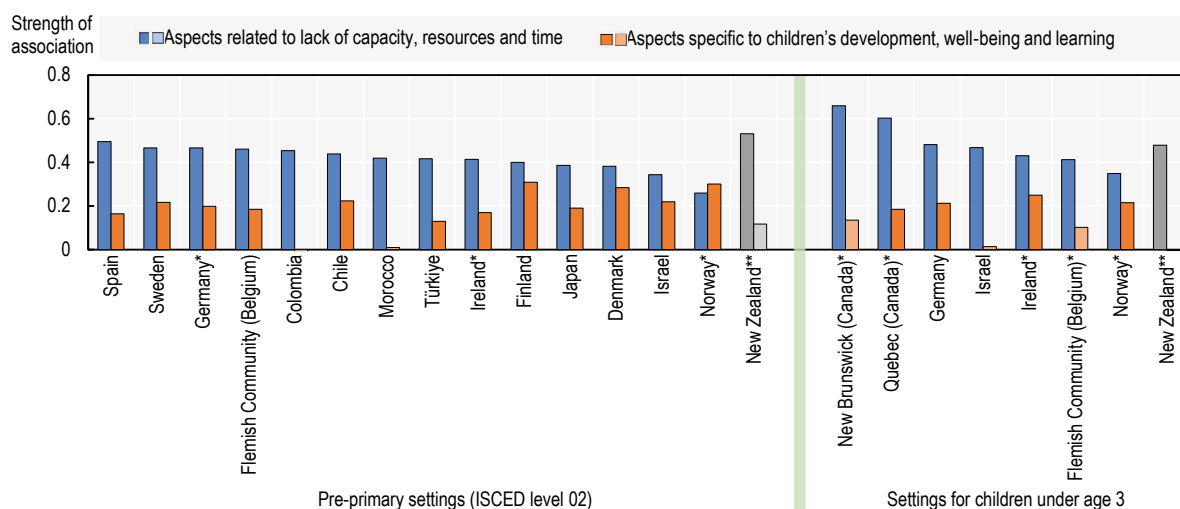
Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.8.12.StatLink  <https://stat.link/o35hdp>

Lack of resources and time strongly relates to staff's level of stress and its impact on their well-being

In all countries and subnational entities and for both levels of ECEC, the two categories of sources of stress (lack of capacity, resources and time and aspects related to children's development, well-being and learning) relate to the level of stress and its impact on well-being, with the relationship being particularly strong for aspects related to capacity, resources and time (Figure 8.6). In addition, in several countries and subnational entities, staff with less than ten years of experience are more likely than staff with more experience to report overall stress and impact on their well-being, independently from being particularly affected by these two main categories of stress (Table D.8.13).

Figure 8.6. Associations between staff's levels of stress and the main sources of stress

Change in the scale of level of stress and its impact on staff's well-being associated with a one-unit change in each of the two scales of the two main categories of sources of work stress



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes:

Results show unstandardised coefficients from a single multivariable linear regression model of the scale of level of stress and its impact on staff's well-being in the two categories of sources of stress. Statistically significant results are indicated in a darker colour. For more information, see Annex C.

Countries and subnational entities, except New Zealand, are ranked in descending order of the strength of the association between the scale of the level of stress and the scale of "sources of stress: aspects related to capacity, resources and time".

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.8.13.

StatLink  <https://stat.link/y1vpdt>

Retaining staff through improved working conditions

Retaining staff in the sector is a key lever to address staff shortages. Staff shortages increase the workload for existing staff, which can be a source of stress and affect staff health, leading to absences that in turn exacerbate the initial problem (Hale-Jinks, Knopf and Knopf, 2006^[15]). Retaining staff allows them to gain experience and develop skills, which can lead to richer interactions with children (see Chapter 4). In addition, high staff turnover that generally accompanies staff shortages disrupts children's attachment to ECEC staff (Howes and Hamilton, 1992^[16]). Research shows that dissatisfaction with working conditions,

such as low salary, responsibilities and weak relationships with colleagues at the workplace can be key reasons staff leave their jobs (Wells, 2015^[17]).

TALIS Starting Strong asks ECEC staff about the factors that can cause them to consider leaving the ECEC staff role in the next five years. This section presents that information and discusses the relationship between considerations for leaving their role, temporarily or permanently, and satisfaction with working conditions and level of stress.

Attending to family responsibilities and working in a job not in the ECEC sector are the most likely reasons for staff to leave their role

In a majority of countries and subnational entities and at both levels of ECEC, attending to family responsibilities is among the reasons to leave the ECEC staff role reported by the largest percentages of staff, particularly among those younger than 49 years old (Table 8.3). This might reflect the high likelihood of maternity leave, as well as other types of leave related to caring for family members linked to a highly feminised workforce and suggests that ECEC staff consider leaving their role only temporarily rather than permanently, which is a positive signal that aligns with generally high levels of job satisfaction. However, it can also translate into a high risk of absences in the sector due to family reasons.

On a more negative note, working in a different job not in the ECEC sector is another main possible reason to leave the profession across participating countries and subnational entities, except for pre-primary staff in Colombia, Morocco and Spain and to some extent Germany for both levels of ECEC. In these first three countries, becoming a teacher in a primary school or above is a likely reason to leave the role, as it is also for staff in settings for children under age 3 in New Brunswick (Canada). Becoming an ECEC setting leader is not a highly likely reason to leave the staff role in any of the systems, although this is more likely for teachers than assistants in several systems (Table D.8.14). These findings might suggest that clear career pathways to stay in the ECEC sector are not well established in at least some of the participating countries and subnational entities (see also Chapter 2). Resolving mental or physical health-related issues is another likely reason to leave the staff role in many countries and subnational entities, particularly for staff at both levels of ECEC in the Flemish Community of Belgium and Germany. In settings for children under age 3, attending to family reasons or solving health issues are the most likely reasons to leave the job, except in Norway and Quebec (Canada), which relates to the above finding that, having extra duties due to absent ECEC staff is a main source of stress, as these likely reasons to leave the job can create temporary absences.

Table 8.3. Reasons to leave the early childhood education and care staff role

Percentage of staff who indicate the following as a “likely” or “highly likely” factor to leave the ECEC staff role in the next five years

	Become an ECEC setting leader	Become a teacher of primary school or above	Work in a different job not in the ECEC sector	Attend to family responsibilities	Retire from work	Return as a student to an education or training programme	Resolve physical health-related issues	Resolve mental health-related issues
Pre-primary settings (ISCED level 02)								
Chile	12	12	33	41	21	35	34	33
Colombia	40	53	36	52	60	41	54	37
Denmark	6	6	33	17	13	24	19	27
Finland	7	8	34	19	16	28	18	19
Flemish Community (Belgium)	3	8	17	16	16	14	20	26
Germany*	15	8	18	33	15	14	31	33
Ireland*	24	24	43	49	19	32	21	29
Israel	28	15	32	46	32	44	40	32
Japan	6	3	48	64	16	4	43	39
Morocco	47	58	37	53	43	46	50	34
Norway*	8	14	39	20	10	23	19	30
Spain	6	34	10	27	15	6	21	23
Türkiye	27	18	24	32	19	16	26	25
New Zealand**	19	26	42	43	17	22	19	26
Settings for children under age 3								
Flemish Community (Belgium)*	11	10	35	30	15	27	38	32
Germany	18	9	23	37	11	16	33	35
Ireland*	24	27	49	52	17	33	29	44
Israel	23	16	35	47	28	48	34	25
New Brunswick (Canada)*	29	32	32	41	16	32	29	33
Norway*	7	12	41	23	12	35	25	25
Quebec (Canada)*	17	24	44	40	19	31	32	32
New Zealand**	28	24	42	51	20	21	23	25

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes:

The question was not administered in Sweden.

ECEC: early childhood education and care.

The shading of the cells applies horizontally to the ranking of reasons to leave the ECEC staff role. Within each country or subnational entity, the most frequently reported reasons to leave the ECEC staff role are indicated in darker shades. The least frequently reported reasons to leave the ECEC staff role are indicated in white. Reasons to leave the ECEC staff role reported by intermediate percentages of staff are indicated in intermediate shades. Grey indicates low survey coverage.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.8.15.

StatLink  <https://stat.link/91uzw6>

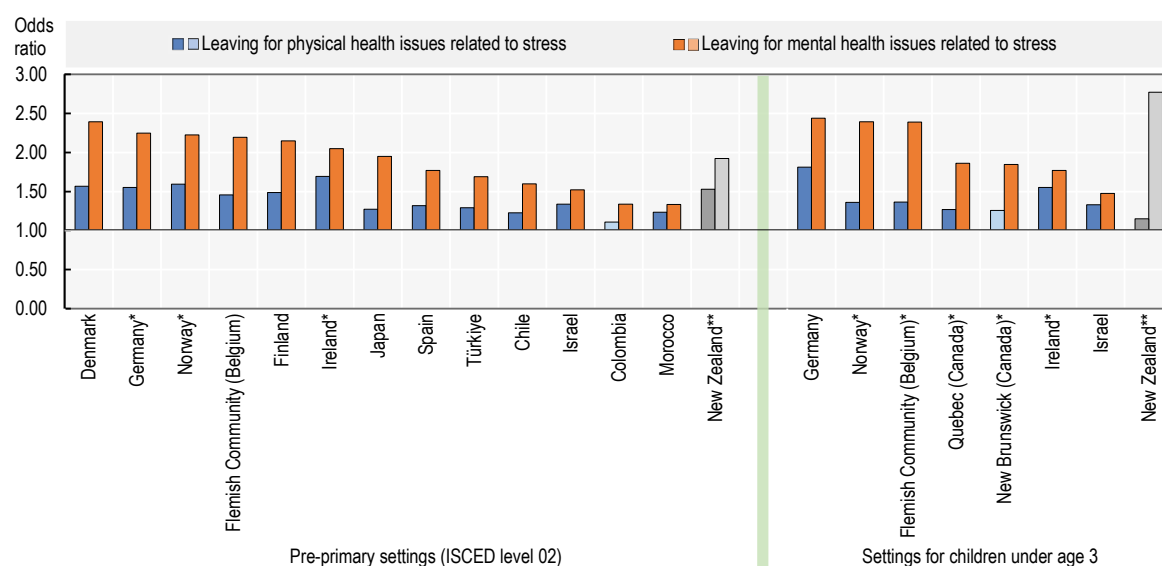
Staff who experience more stress are more likely to consider leaving the role for physical and mental health issues

In almost all ECEC systems, staff who report a higher level of stress are more likely to report that resolving physical and mental health-related issues is a reason to leave the role in the next five years, even after accounting for other individual and setting-level characteristics (Figure 8.7). This is particularly the case

for leaving to resolve mental health issues. In addition, staff who report more stress are also more likely to consider leaving the role for a different job not in the ECEC sector (Table D.8.16). Other studies have found that ECEC teachers' higher reports of stress and emotional exhaustion are associated with their intention to leave the sector rather than stay (Grant, Jeon and Buettner, 2019^[18]). These findings highlight feedback loops through stress that can exacerbate staff shortages: staff shortages are a source of stress which have an impact on the level of stress, while staff who are more stressed are more likely to consider leaving the sector for health issues. Policies to mitigate ECEC staff stress, which are discussed at the end of this chapter, are, therefore, crucial.

Figure 8.7. Associations between levels of stress and the likelihood of considering leaving the staff role for physical and mental health issues

Odds of staff considering it “likely” or “very likely” to leave the ECEC staff role for mental or physical health issues, associated with a one-unit change in the scale of the level of stress and its impact on well-being



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes:

Results show odds ratios from two multivariable logistic regression models linking: 1) staff reporting it is “likely” or “very likely” they would leave the ECEC staff role to resolve mental health-related issues; and 2) staff reporting it is “likely” or “very likely” they would leave the ECEC staff role for physical health-related issues to the scale of the level of stress and its impact on well-being. Statistically significant results are indicated in a darker colour. For more information, see Annex C.

The question on reasons to leave the staff role was not administered in Sweden.

ECEC: early childhood education and care.

Countries and subnational entities, except New Zealand, are ranked in descending order of the strength of the association between the scale of the level of stress and considering leaving the profession for mental health issues.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.8.17 and D.8.18.

StatLink  <https://stat.link/uv2g1k>

ECEC staff who are satisfied with their work at the ECEC setting are less likely to consider leaving the role for a different job not in the ECEC sector

In a majority of countries and subnational entities and for both levels of ECEC, ECEC staff who are satisfied with their work at the ECEC setting are less likely to consider leaving the role for a different job not in the

ECEC sector (Table D.8.16). This aligns with evidence from the United States of teacher-reported poor working conditions predicting intentions to move or leave the ECEC field (Grant, Jeon and Buettner, 2019^[18]). At the pre-primary level in Denmark and New Zealand**, in settings for children under age 3 in Germany and in settings for both levels of ECEC in the Flemish Community of Belgium, staff who are satisfied with their salary are also less likely to consider leaving the role for a job outside the ECEC sector. The lack of relationship between satisfaction with salary and intention to leave in other systems might suggest that, for current staff, satisfaction with the working environment at the ECEC setting might, to some extent, prevail over satisfaction with salary in the decision to stay in the job.

ECEC staff who have four to nine years of experience, and to some extent novice staff, are more likely to consider leaving the role for a different job not in the ECEC sector compared to staff with more experience. This finding, which might not be specific to the ECEC sector, suggests that efforts to retain ECEC staff need to pay particular attention to early- and mid-career ECEC staff.

Balancing job demand and resources to mitigate stress

Various components of working conditions can be thought of as either generating demands on staff (workload, multitasking, addressing children's diverse needs) or resources and rewards (autonomy, experience, salary) to meet these demands. Job demands require sustained physical and/or psychological effort and are, therefore, associated with certain costs for individual staff while job resources enable workers to achieve goals and deal with or face job demands (Demerouti et al., 2001^[19]). According to the “Job Demands and Resources” model, a lack of reciprocity between effort and reward or resource can lead to stress. This model can help understand why similar job demands translate into different levels of stress across workers depending on other job demands and differences in resources or rewards workers may have to perform their jobs. Therefore, this model can inform policies that aim to mitigate stress and support well-being among ECEC staff (OECD, 2020^[5]; Heilala et al., 2021^[7]).

TALIS Starting Strong is well-suited to analyse staff's well-being through the “Job Demands and Resources” approach as it includes information on job demands, resources and rewards as well as on the level of stress. This section discusses how various aspects of job demands and resources relate to ECEC staff stress and identifies aspects of working conditions that create demands or resources that tend to buffer against or exacerbate stress. It points to directions to mitigate stress, which relates to some of the reasons for considering leaving the staff role as discussed in the previous section.

Teachers and more educated staff are more likely to report stress, suggesting that stress increases with responsibilities

In several ECEC systems, particularly for pre-primary settings, larger percentages of teachers than assistants report being stressed in their work, that their jobs negatively impact their mental health and, to a lesser extent, their physical health (Table D.8.10). Teachers are also less likely than assistants to report that their jobs leave time for their personal life. In the same way, more highly educated staff are more likely to report stress and less likely to report having time for their personal life than less educated staff in several systems (Table D.8.19). Similar findings hold for full-time staff, who report more stress than those working part time in a number of countries and subnational entities, although in pre-primary settings in Colombia, part-time staff, particularly those who would prefer to work full time, are more likely to report stress (Table D.8.9). By contrast, few differences exist in levels of stress according to the staff's number of years of experience (Table D.8.11). This could be the result of compensating effects: on the one hand, novice staff might be more stressed as they do not have experience to help them face job demands, on the other hand, they might have less responsibilities than more experienced staff. Overall, these findings point to stress and workload increasing with roles, educational attainment and number of working hours, which are all likely to relate to increasing responsibilities at work.

These results resonate with those that indicate that in some countries and subnational entities, staff who report a higher level of stress also report more frequent use of child-centred approaches to structuring and facilitating learning (Table D.5.3) and engagement in daily adaptive pedagogical practices (Table D.5.4). Together they suggest that some staff engage more in planning for activities with a group of children and have more responsibility to attend to a variety of children's needs. That is, teachers, in particular, may be doing more to engage in high-quality interactions with children but are also more likely to feel stressed by the scope of these job demands. Importantly, it does not seem that staff who report higher levels of stress engage in fewer high-quality practices with children; however, given that results indicate that staff who are more stressed are more likely to consider leaving the ECEC staff role for physical and mental health-related issues or leave the ECEC sector entirely, it is important to consider the toll on staff who have more responsibilities (Tables D.8.16, D.8.17 and D.8.18).

Multitasking and having a higher share of vulnerable children in the group are linked to higher stress in several countries, even after accounting for a range of job resources

As stress can be expected to increase with work responsibilities, it is important to understand whether the resources and rewards that ECEC staff get for and from their work counterbalance the demands related to their responsibilities. Analyses in this section consider four types of job demands: 1) multitasking; 2) having more than 10% of children with special education needs in the target group; 3) having more than 10% of children from socio-economically disadvantaged homes in the target group; and 4) setting size (Table 8.4). The analysis also accounts for a large range of resources such as self-efficacy, satisfaction with the level of autonomy and with leadership that can help ECEC staff perform their work, and job rewards such as satisfaction with salary, all of which can buffer the effect of job demands against stress.

In several ECEC systems, the four types of demands are positively associated with the level of stress and its impact on well-being (Table 8.4). For instance, more multitasking is associated with higher stress and impact on well-being for staff in pre-primary settings in Denmark, Finland, Germany and Norway and in settings for children under age 3 in the Flemish Community of Belgium. In some countries and subnational entities (Japan, Spain and Sweden in pre-primary settings and the Flemish Community of Belgium in settings for children under age 3), the size of the ECEC setting relates positively to stress, which might capture additional workload linked to bigger settings, such as more complex administrative tasks and the fact that the number of staff per child tends to become less favourable as the size of the setting increases (see Chapter 3). Having a higher share of children with special education needs is associated with higher stress in pre-primary settings in Denmark, Ireland and Spain, and in settings for children under age 3 in Quebec (Canada). Likewise, having more children from socio-economically disadvantaged homes in the target group is associated with higher stress in pre-primary settings in Finland and New Zealand**, in settings for children under age 3 in Quebec (Canada), and in Norway for both levels of ECEC.

Table 8.4. Job demands and resources and their links to stress for staff in early childhood education and care settings

Statistically significant associations between the scale of the level of stress and its impact on staff's well-being and job demands and resources

	Job demands				Job resources						
	Multitasking	Percentage of children with special needs in the target group	Percentage of children from socio-economically disadvantaged homes in the target group	Setting size	10% or more working hours without children	Self-efficacy (overall)	Satisfaction with level of autonomy	Satisfaction with salary	Satisfaction with setting leadership	Engagement in collaborative practices	Number of staff per child in the target group
Pre-primary settings (ISCED level 02)											
Chile							-		-		
Colombia								-	-		
Denmark	+	+				-	-	-	-		
Finland	+		+			-	-	-	-		
Flemish Community (Belgium)							-	-	-		
Germany*	+						-		-		
Ireland*		+					-		-		
Israel								-			-
Japan				+			-	-	-		
Morocco								-			
Norway*	+		+				-	-	-	-	
Spain		+		+			-	-	-		-
Sweden				+		-	-	-			
Türkiye							-	-	-		
New Zealand**			+		-	-					
Settings for children under age 3											
Flemish Community (Belgium)*	+			+			-	-		-	
Germany						-	-	-	-		
Ireland*							-	-	-		
Israel						-	-	-	-		
New Brunswick (Canada)*							-	-	-		
Norway*			+			-	-	-		-	
Quebec (Canada)*	-	+	+			-		-	-		
New Zealand**									-		

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only include respondents in the sample and not the population targeted by the survey. For more information, see Annex B.

Note: Results show the direction of associations from a single multivariable linear regression model of the scale of the level of stress and its impact on staff's well-being and the list of variables indicated in the table together with additional control variables. For more information, see Annex C.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.8.20

Satisfaction with salary, autonomy and leadership are key resources that act as a buffer of stress

In almost all ECEC systems, satisfaction with salary, autonomy and leadership are key resources that act as a buffer of stress (Table 8.4). Self-efficacy also relates negatively to stress in many systems, particularly in settings for children under age 3, while more staff per child in the target group also acts as a buffer of stress, although only in a limited number of systems for pre-primary settings. Engagement in collaborative practices acts as a buffer only in Norway for both levels of ECEC and the Flemish Community of Belgium for settings for children under age 3. According to research, collaborative practices are, however, an important driver of work performance and they also relate to staff practices with children (see Chapter 9). The limited number of associations found in the analysis suggests that collaborative practices may often not be sufficiently developed or targeted to act as a buffer of stress. Finally, spending 10% or more of the working hours without children acts as a buffer of stress only in pre-primary settings in New Zealand**. This general lack of association might come from the fact that when dedicated time for tasks that are more easily completed without children does not exist or is too limited, staff tend to work extra hours to create time without children (see Chapter 4), which does not buffer against stress. Dedicated and paid time without children to address these tasks might be a better resource against stress but is not captured by TALIS Starting Strong 2024.

While most of the job resources considered in the analysis act as buffers of stress, as reflected in the significant negative association with the level of stress, in some countries and subnational entities, at least one of the four types of job demands remains positively associated with the level of stress when taking into account a large range of resources. This means that the resources considered in the analysis are not sufficient or not targeted enough towards staff with higher demands to fully buffer against the effect of job demands on stress.

Policy pointers

- **Raise the status and incentives of the profession by ensuring that staff's salaries are aligned with their responsibilities and better define career progressions in the ECEC sector.** While job satisfaction is high, the relatively low perceived social status of the profession and the reasons selected by staff for considering leaving the profession point towards salaries and career progression being important levers for addressing staff shortages. In the presence of budget constraints, policies can aim to better define a variety of staff roles with salaries, autonomy and responsibilities increasing as staff gain experience and competencies. In Colombia, Morocco and Spain for pre-primary and to some extent New Brunswick (Canada) for settings for children under age 3, leaving the ECEC sector is not much considered a likely reason to leave the ECEC staff role while staff envisage to leave to become a leader or a primary teacher in Spain. In these countries and subnational entities, feeling valued by society is also more widespread than in others.
- **Ensure that staff absences do not hinder the functioning of ECEC settings.** Staff absences are a major source of staff's stress by creating extra duties and a key hindrance to the provision of a quality environment for children according to leaders, particularly in settings for children under age 3. Structural features of the ECEC sector might translate into more challenging and widespread absences than in some other sectors of activity: ECEC settings often include only a small number of staff but need to meet mandatory staff-to-child ratios and face a heavy workload; a highly feminised workforce, with women tending to bear more responsibilities for family care needs in addition to maternity leaves, might translate into more absences, particularly when working in low-wage jobs (ILO, Statistics Department, 2024^[20]; OECD, 2023^[21]). Economy-wide policies that give fathers non-transferable rights to parental leave can lead to men spending more time caring

for their children and thereby could reduce leave and absences among women after the arrival of children (OECD, 2025^[22]). In addition, policies can ensure that absences do not disrupt work by, for instance, developing pools of replacement staff and a better or more flexible allocation of human resources across settings. In Japan and Spain where ECEC staff are predominantly women (as in other countries and subnational entities; see Chapter 2), less than 20% of pre-primary leaders indicate staff absences being a hindrance to the quality of the ECEC environment. These are also countries where having extra duties due to absent staff is not among the major sources of stress, in contrast with many other systems.

- **Ensure that good working conditions can balance the most demanding parts of ECEC jobs and help mitigate stress.** Multitasking, having too much work related to documenting children's development and accommodating children with special education needs are key aspects of the ECEC job but closely relate to stress. Strong leadership (see Chapter 7), enhanced collaborative practices (see Chapter 9) and increased salaries can help staff face the more demanding parts of their work and can, therefore, be targeted to settings or staff facing more complex job demands.

References

- Cumming, T. (2016), "Early childhood educators' well-being: An updated review of the literature", *Early Childhood Education Journal*, Vol. 45/5, pp. 583-593, <https://doi.org/10.1007/s10643-016-0818-6>. [6]
- Demerouti, E. et al. (2001), "The job demands-resources model of burnout", *Journal of Applied Psychology*, Vol. 86/3, pp. 499-512, <https://doi.org/10.1037/0021-9010.86.3.499>. [19]
- European Commission: Directorate-General for Education, Youth, Sport and Culture (2023), *Staff Shortages in Early Childhood Education and Care (ECEC) – Policy Brief*, Publications Office of the European Union, Brussels, <https://doi.org/10.2766/385>. [4]
- German Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth (n.d.), "Federal programme "Skills Offensive" for childcare in daycare centers and all-day schools", web page, <https://www.fruehe-chancen.de/en/themen/fachkraefte-und-qualifizierung/rueckschau-bundesprogramm-fachkraefteoffensive-laufzeit-2019-bis-2022> (accessed on 1 September 2025). [12]
- Grant, A., L. Jeon and C. Buettner (2019), "Relating early childhood teachers' working conditions and well-being to their turnover intentions", *Educational Psychology*, Vol. 39/3, pp. 294-312, <https://doi.org/10.1080/01443410.2018.1543856>. [18]
- Hale-Jinks, C., H. Knopf and H. Knopf (2006), "Tackling teacher turnover in child care: Understanding causes and consequences, identifying solutions", *Childhood Education*, Vol. 82/4, pp. 219-226, <https://doi.org/10.1080/00094056.2006.10522826>. [15]
- Hamre, B. and R. Pianta (2005), "Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure?", *Child Development*, Vol. 76/5, pp. 949-967, <https://doi.org/10.1111/j.1467-8624.2005.00889.x>. [2]
- Heilala, C. et al. (2021), "Work demands and work resources: Testing a model of factors predicting turnover intentions in early childhood education", *Early Childhood Education Journal*, Vol. 50/3, pp. 399-409, <https://doi.org/10.1007/s10643-021-01166-5>. [7]

- Howes, C. and C. Hamilton (1992), "Children's relationships with child care teachers: Stability and concordance with parental attachments", *Child Development*, Vol. 63/4, pp. 867-878, <https://doi.org/10.1111/j.1467-8624.1992.tb01667.x>. [16]
- Hughes, B. et al. (2024), "Occupational prestige: The status component of socioeconomic status", *Collabra: Psychology*, Vol. 10/1, <https://doi.org/10.1525/collabra.92882>. [8]
- ILO, Statistics Department (2024), *The Impact of Care Responsibilities on Women's Labour Force Participation*, International Labour Organization, Geneva, <https://doi.org/10.54394/lptt5569>. [20]
- Kwon, K. et al. (2021), "Testing a holistic conceptual framework for early childhood teacher well-being", *Journal of School Psychology*, Vol. 86, pp. 178-197, <https://doi.org/10.1016/j.jsp.2021.03.006>. [14]
- Leseman, P. and P. Slot (2025), "Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses", *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [1]
- New Zealand Ministry of Education (2024), "9-6 Attestation of certificated teachers' salaries", in *ECE Funding Handbook*, Ministry of Education, Wellington, <https://www.education.govt.nz/education-professionals/early-learning/funding-and-financials/ece-funding-handbook/chapter-9-completing-the-rs7-return/9-6-attestation-of-certificated-teachers-salaries> (accessed on 1 September 2025). [13]
- OECD (2025), *Paid leave for fathers: Recent OECD policy trends*, OECD, Paris, <https://doi.org/10.1111/JOMF.12507;WGROU:STRING:PUBLICATION>. [22]
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>. [9]
- OECD (2025), *Results from TALIS 2024: The State of Teaching*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/90df6235-en>. [11]
- OECD (2024), *Education at a Glance 2024: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/c00cad36-en>. [10]
- OECD (2023), *Joining Forces for Gender Equality: What is Holding Us Back?*, OECD Publishing, Paris, <https://doi.org/10.1787/67d48024-en>. [21]
- OECD (2020), *Building a High-Quality Early Childhood Education and Care Workforce: Further Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/b90bba3d-en>. [5]
- OECD (2019), *Good Practice for Good Jobs in Early Childhood Education and Care*, OECD Publishing, Paris, <https://doi.org/10.1787/64562be6-en>. [3]
- Wells, M. (2015), "Predicting preschool teacher retention and turnover in newly hired Head Start teachers across the first half of the school year", *Early Childhood Research Quarterly*, Vol. 30, pp. 152-159, <https://doi.org/10.1016/j.ecresq.2014.10.003>. [17]

9

Looking forward: Preparedness for change in early childhood education and care

This chapter explores areas for strengthening the capacity of early childhood education and care (ECEC) to respond to complex and shifting demands. It discusses ECEC settings' and staff's engagement in co-operating with other actors and services, professional collaboration and monitoring practices, and their digital preparedness and strategies to cope with unexpected disruptions. It concludes with pointers to unlock potential to increase preparedness for future challenges among ECEC settings and staff.

Key findings

- **ECEC settings' engagement with other sectors as well as with primary schools is limited.** Co-operation with other services (e.g. health, family or social) can support an ECEC system's capacity to adapt to changes in demands but is not frequent in the majority of settings. Countries and subnational entities with relatively high levels of such types of co-operation include Chile, Colombia, Denmark and the Flemish Community of Belgium at the pre-primary level and Germany in settings for children under age 3.
- **Staff's engagement in professional collaborative practices is the most consistent predictor of their adoption of a child-centred approach to structuring and facilitating learning and of daily adaptive pedagogical practices.** Staff collaboration is frequent within ECEC settings, but less for assistants than for teachers in pre-primary settings.
- **Leadership practices can promote staff collaborative practices within ECEC settings.** Staff engagement in collaborative activities is associated with leaders providing greater support for staff's pedagogical learning and adopting a distributed leadership approach. These associations are visible in Chile, Germany, Morocco and Sweden at the pre-primary level and in Ireland and Israel in settings for children under age 3.
- **External monitoring in ECEC settings mainly focuses on structural aspects of quality.** External inspections carried out yearly or more frequently tend to focus on structural quality features such as child-adult ratios, group size or staff qualification levels, as well as on the adequacy of facilities or financial records, but less often on aspects of process quality. The internal monitoring of staff's interactions with children is widespread but follow-up feedback from setting leaders to staff is less prevalent. This holds at the pre-primary level and in settings for children under age 3.
- **More regular quality monitoring is associated with change processes in ECEC settings.** Pre-primary setting leaders are more likely to adjust their setting's policies and practices based on monitoring results when external and internal monitoring activities take place more frequently. This applies most consistently in Morocco and Spain.
- **Staff feel better prepared to use digital tools in their work with children in countries where digitalisation is more regularly integrated into workforce preparation programmes.** In most countries and subnational entities, and at both levels of ECEC, two-thirds or more of staff have received training on the use of digital technologies at some point in their careers. There is a strong system-level association between the share of staff who received this training in both initial education and recent ongoing professional development activities and the share of staff with a high sense of self-efficacy for using digital tools when working with children.
- **The digital infrastructure of ECEC settings is rarely perceived as a barrier to quality.** In all participating countries and subnational entities except Colombia and Morocco, less than half of setting leaders see inadequacies of digital resources as hindering capacity to provide quality environments for children. However, in some countries, more adequate digital infrastructure is reported in private settings than in public ones. Staff who feel more confident using digital tools hold more favourable views about investing in digital infrastructure.
- **Crises are a source of stress for a sizable share of ECEC professionals.** At least one in five staff and setting leaders in most participating countries and subnational entities report stress from adapting to unexpected disruptions. In more cases, setting leaders report more stress from shocks than staff, but the opposite holds in some other countries and subnational entities too. Staff who are generally more satisfied with their setting leadership are less likely to experience this type of stress, while staff more engaged in collaborative practices are more exposed to it.

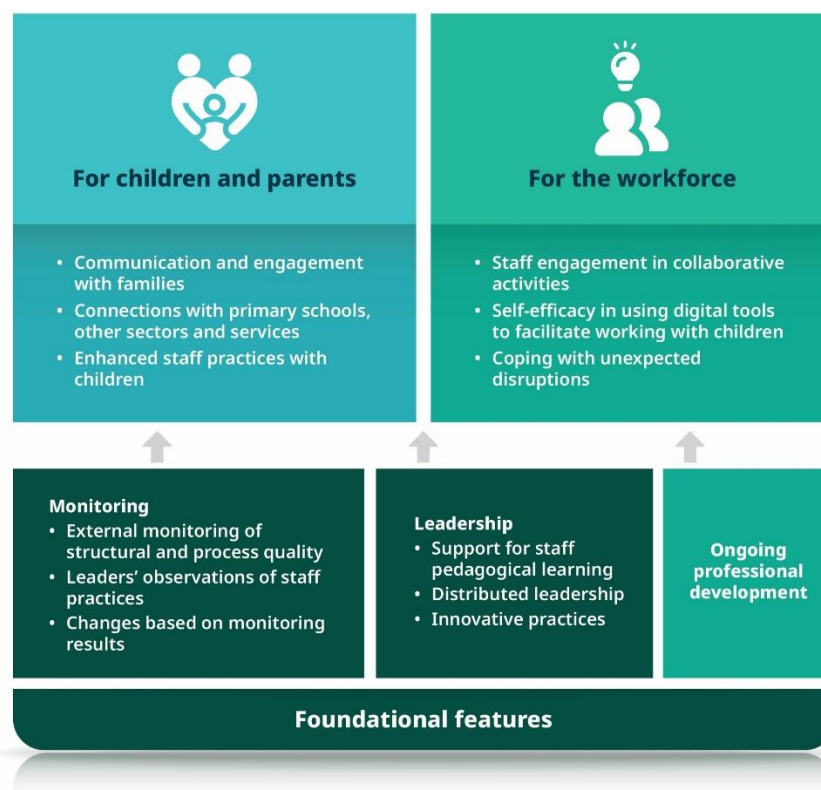
A defining feature of a strong ECEC system is its capacity to respond to complex and shifting demands and to shocks. These demands include adapting to the growing diversity of children, to the marketisation and privatisation of ECEC services, and to families' and society's heightened expectations on quality (see Chapter 1). Central to this capacity are the social and institutional networks of ECEC settings and a culture of collaborative learning and knowledge-sharing among ECEC professionals (Leseman and Slot, 2025^[1]). Connections with communities and other sectors and internal collaborative practices give ECEC systems opportunities to draw on extended resources and collective intelligence when responding to unanticipated challenges. Embracing a culture of evaluation for continuous improvement (OECD, 2015^[2]; 2022^[3]), and being open to innovation (Leseman and Slot, 2025^[1]) also better prepares ECEC systems for change. Retaining staff and ensuring their well-being and adequate working conditions for them are also essential to the capacity of ECEC systems to deliver high-quality services during change processes, including in times of crisis (OECD, 2020^[4]). Untapped potential across these dimensions means there are opportunities to strengthen the capacity of ECEC to meet a growing range of quality and equity challenges (OECD, 2025^[5]).

The Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024 provides unique insights into some of the factors related to preparedness for change in the ECEC sector across the participating countries and subnational entities (Figure 9.1). Questions on ECEC settings' engagement with families, primary schools and other sectors capture connections between ECEC and other key actors in the early years. The survey also explores collaboration within settings, which illustrates a vector for collaborative learning. Information on the monitoring of settings speaks to evaluation and improvement processes. Questions on settings' digital infrastructure and on staff's training experiences and self-efficacy for using digital tools shed light on the technological dimension of innovation. Further, the survey provides information on some of the factors that can help ECEC professionals cope with disruptions. This chapter draws on ECEC staff's and setting leaders' views on these topics to distil policy pointers that could help ECEC systems increase their readiness to respond to future, unforeseen challenges and shifting demands on the ECEC workforce.

This chapter addresses the following questions:

- How often do ECEC settings and staff collaborate with external actors? What is the extent of collaborative work within settings and how do leaders support it?
- What aspects of the quality of ECEC are monitored in ECEC settings and at what frequency? Is monitoring associated with changes in settings' policies and practices?
- Do ECEC staff feel prepared to use digital technologies to facilitate their work with children? Is the existing digital infrastructure in ECEC settings a hindrance to quality provision?
- To what extent is adapting to unexpected disruptions a source of stress for ECEC staff and setting leaders, and what characteristics of settings can protect staff and leaders against it?

Figure 9.1. Analytical framework for preparedness for change to strengthen early childhood education and care



Promoting collaboration and learning with others

Strong ECEC systems are characterised by a marked community orientation, reflected in outreach to families and local communities and inter-sectoral collaboration for integrated service provision (Leseman and Slot, 2025^[11]). This follows from the recognition that a child's developmental process forms a continuum from the pre-natal period throughout early childhood, thus calling for an alignment of ECEC with other early years policies such as in the health, family and social sectors (OECD, 2025^[5]). In turn, local connections with schools can help bridge potential discontinuities in children's learning and developmental experiences as they transition from ECEC to primary education (Garner, Nicholas and Rouse, 2021^[6]).

Professional development activities can prepare the ECEC workforce to learn from and collaborate with each other as well as with other stakeholders, placing an intentional focus on the levers and benefits of collaboration with families, other settings and primary schools, and community services. Meanwhile, ECEC professionals can learn from their peers when working together and engaging in collaborative reflection on their practice (Liu, Hedges and Cooper, 2023^[7]). Collaboration with colleagues generally involves the sharing of contextualised information, which can amplify the benefits of formal training (Cramer et al., 2021^[8]), and ECEC staff welcome approaches to professional development that combine formal components with observations, discussion and feedback from peers (Yodogawa, Nozawa and Akita, 2022^[9]). Leadership practices can also support effective collaboration and knowledge sharing within ECEC settings by building relational trust among staff and encouraging reflective practices (Thornton, 2023^[10]).

TALIS Starting Strong 2024 offers a distinctive lens on the dynamics of professional collaboration and learning in the ECEC sector. It asks ECEC setting leaders about the types and frequency of their setting's engagement in collaboration with families, with other settings and primary schools, and with other sectors

and services. Both setting leaders and staff provide information on the format and focus of recent professional development activities, including those that involve collaborative practices. Staff also report on their engagement in collaborative activities within settings, while leaders report on the ways in which they support staff in their professional learning and collaboration.

Communication with families and peers are common forms of external engagement for ECEC settings while co-operation with other services and home-visits are less frequent

In most participating countries and subnational entities, large shares of setting leaders at both levels of ECEC report frequent informal communication with parents (e.g. conversations on children's activities), while formal communication channels (e.g. parent-staff meetings) are highly used in pre-primary settings in Chile, Colombia, Denmark and Japan (Table 9.1). In many systems, staff spend over two hours of their working time every week in exchanges with parents and guardians (Table Staff.28; see also Chapter 4).

Particularly when taking an institutional character, ECEC settings' engagement with external actors takes different forms across countries (Table 9.1). Frequent communication with staff and leaders from other ECEC settings is among the most commonly reported forms of external engagement in most countries and subnational entities, being most prevalent in pre-primary settings in the four Nordic countries and Israel as well as in settings for children under age 3 in Norway. Meanwhile, contact with primary schools is most common in pre-primary settings in the Flemish Community of Belgium and Spain, the two systems where pre-primary settings are most often co-located with primary schools (Table Leader.15). At the pre-primary level, consultations with child development specialists (e.g. speech therapists, psychologists) and co-operation with child, family or social services (e.g. child protection agency, family support services) are most frequently reported in Denmark, New Zealand** and Spain, but also relatively frequent in Chile and the Flemish Community of Belgium. In settings for children under age 3, these two forms of external engagement are most common in Germany, Israel, New Zealand** and Norway. In turn, collaboration with health-related services (e.g. providing screening and health support for children or families) and home-visits to help parents or guardians reinforce children's well-being, development and learning are relatively common practices in pre-primary settings in Chile and Colombia (see also Chapter 5). These results illustrate a variety of strategies to integrate early years services that can facilitate access to a range of support for diverse families while helping ECEC settings and staff navigate challenges in their work.

Results also reveal a broadly similar pattern of engagement with external actors between publicly managed and privately managed ECEC settings. Nonetheless, at the pre-primary level, private settings appear to be more active in communicating with families in countries such as Colombia, Finland, Morocco, Norway, Spain and Türkiye, while engagement with staff and leaders in other ECEC settings and primary schools is more frequent among public settings in countries such as Japan or Sweden (Table D.9.1). This appears consistent with a commodification trend in private ECEC, with parents seen as consumers and increasing pressure on settings and staff to be responsive to them (Vandenbroeck, Lehrer and Mitchell, 2022^[11]).

Table 9.1. Engagement with external actors in early childhood education and care settings

Percentage of ECEC settings whose leaders report engaging at least monthly in the following co-operation and communication activities with external actors

	Visits to children's homes to help parents or guardians	Collaboration with health-related services	Co-operation with child, family or social services	Communication with primary school principals or teachers	Consultation with child development specialists	Formal communication with parents or guardians	Communication with staff and/or leaders from other ECEC settings	Informal communication with parents or guardians
Pre-primary settings (ISCED level 02)								
Chile	27	44	48	40	48	83	64	90
Colombia	40	46	44	59	33	73	73	72
Denmark	2	45	63	26	80	76	89	97
Finland	1	22	29	39	49	37	84	90
Flemish Community (Belgium)	2	36	41	90	63	55	70	91
Germany*	2	14	30	29	37	66	60	88
Ireland*	3	15	18	19	23	37	52	97
Israel	8	11	12	16	55	37	80	85
Japan	4	15	20	9	25	93	71	66
Morocco	4	13	19	56	9	33	43	60
Norway*	0	15	21	22	49	26	83	88
Spain	3	32	50	79	68	67	44	87
Sweden	0	15	23	33	46	36	75	74
Türkiye	29	23	19	65	24	42	60	68
<i>New Zealand**</i>	0	30	42	31	60	40	57	100
Settings for children under age 3								
Flemish Community (Belgium)*	18	4	10	a	3	36	57	75
Germany	2	15	43	23	33	59	70	84
Ireland*	1	15	20	26	16	34	53	95
Israel	7	7	26	22	25	40	71	76
New Brunswick (Canada)*	2	8	19	12	23	42	51	93
Norway*	0	16	22	13	58	18	94	91
Quebec (Canada)*	1	10	12	0	29	35	43	88
<i>New Zealand**</i>	1	21	24	28	60	41	69	100

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: The shading of the cells applies horizontally to the ranking of practices to engage with external actors within countries and subnational entities. Within each country and subnational entity, the most frequently endorsed practices for engaging with external actors are indicated in darker shades. The least frequently endorsed practices are indicated in white. Practices with intermediate percentages are indicated by intermediate shades. Grey indicates low survey coverage.

a: The question was not administered in settings for children under age 3 in the Flemish Community of Belgium.

ECEC: early childhood education and care.

Activities are presented in order of the least to the most common, on average, across countries and subnational entities.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.9.1.

Higher percentages of leaders than of staff participate in professional development activities enabling peer learning and collaboration

At the pre-primary level, fewer than half of leaders in all participating countries and subnational entities except Finland, the Flemish Community of Belgium and Japan report having taken part in planned visits to other ECEC settings as part of their professional development activities in the 12 months prior to the survey. Recent participation in either formal or informal networks for the purpose of professional learning is somewhat more common, with more than half of pre-primary setting leaders in ten countries and subnational entities reporting this, similar to participation in ECEC research conferences in eight cases. Denmark, the Flemish Community of Belgium and Norway are among the countries and subnational entities where pre-primary setting leaders report these activities more commonly, while in Colombia, Ireland and Morocco they were less often part of leaders' recent professional development. In settings for children under age 3, visits to other settings are generally less frequently integrated into leaders' professional development activities than at the pre-primary level, while participation in conferences and professional networks is equally common, and particularly high in the Flemish Community of Belgium, Germany and Norway (Table D.9.2; see also Chapter 7).

Relative to staff, in nearly all participating countries and subnational entities a larger percentage of leaders report participating in visits to other settings or to classrooms/playrooms within their settings, as well as in professional conferences or networks. This is particularly the case in countries and subnational entities where leaders' levels of participation in these types of activities are relatively high, such as Denmark and Japan at the pre-primary level, or at both levels of ECEC in the Flemish Community of Belgium and Norway (Table D.9.3; see also Chapters 6 and 7). Differences between staff and leaders may be somewhat less pronounced in countries and subnational entities where there are higher shares of leaders with staff duties (i.e. those who regularly work directly with children), including Germany, Israel and New Zealand** for both levels of ECEC. Notably, however, Denmark also has many leaders with staff duties in comparison to other countries and subnational entities; thus, in Denmark, like staff, leaders with staff duties are less likely than their colleagues who are leaders without regular responsibilities directly with children to participate in visits to other settings or classrooms/playrooms.

TALIS Starting Strong 2024 also asks setting leaders who do not have regular staff duties whether their professional development activities in the 12 months prior to the survey included topics with an explicit focus on promoting collaboration. In all countries and subnational entities except one, more than half of pre-primary leaders report those topics were included in their recent professional development. This includes over two-thirds of pre-primary leaders reporting training on collaborating with parents or guardians in Chile, Colombia, Ireland, Japan, Morocco, Spain and Türkiye; training on collaborating with other settings or primary schools in Colombia, the Flemish Community of Belgium, Japan and Norway; and training on collaborating with community services (e.g. health services, social services) in Colombia, Norway and Spain. A majority of leaders of settings for children under age 3 in many of the countries and subnational entities also report having covered these topics in recent training activities, with somewhat more emphasis on collaborating with parents or guardians compared to other types of collaboration (Table D.9.2).

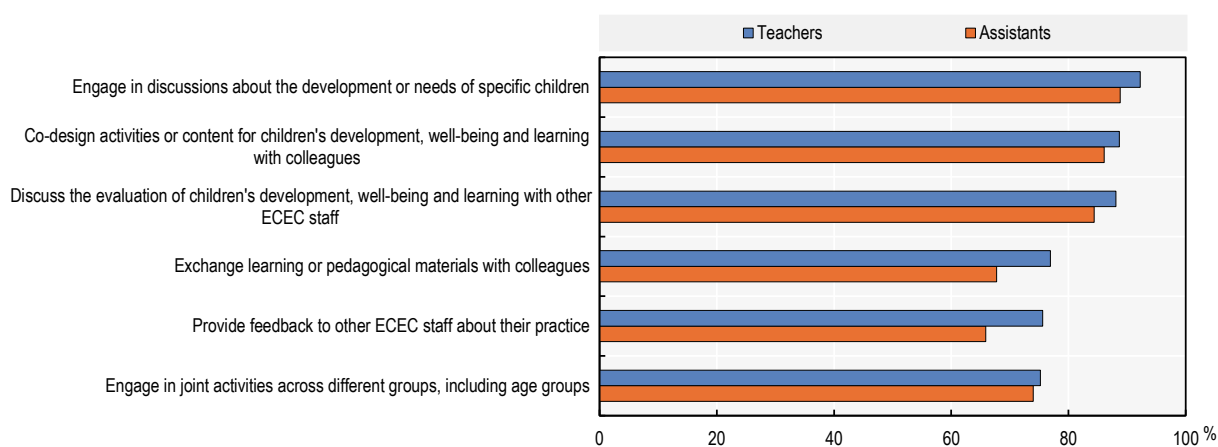
Overall, results suggest that opportunities for learning and collaboration with peers and other actors within and outside ECEC settings are common in ECEC professional development offerings in most countries and subnational entities that took part in TALIS Starting Strong 2024. At the same time, participation in these activities tends to be higher among setting leaders than among staff and is, in both cases, far from universal.

Assistants are generally less involved in collaborative activities than teachers

Staff engagement in collaborative activities in ECEC settings, such as exchanging materials with colleagues or co-designing activities, is high across all countries and subnational entities; however, not all staff roles engage in collaborative practices to the same extent. At the pre-primary level, assistants are less involved in these practices across countries and subnational entities (Figure 9.2), which may reflect somewhat lower expectations of their involvement in tasks such as pedagogical planning. With the exception of joint activities across groups of children, smaller percentages of assistants than of teachers working in pre-primary settings tend to report frequent engagement in collaboration with colleagues. By contrast, there is generally more similar engagement in collaborative activities between teachers and assistants working in settings for children under age 3 (Table D.9.4). When the comparison is made between staff identifying as a teacher or a leader relative to all other staff roles (i.e. assistants as well as other types of staff working directly with children), and other staff and setting characteristics are taken into account to better isolate the effect of the role, a similar pattern of more intense engagement in collaboration by staff with more pedagogical responsibilities is also observed at the pre-primary level in Chile, Finland, the Flemish Community of Belgium and Spain (Table D.9.5, Model 4).

Figure 9.2. Teachers' and assistants' engagement in collaborative practices in early childhood education and care settings

Average percentage of pre-primary staff engaging at least monthly in collaborative practices in their ECEC setting, by staff role



Notes: Averages include Chile, Denmark, Finland, Germany, Ireland, Israel, Norway and Sweden, where substantive comparisons between teachers and assistants can be made, and exclude the other participating countries and subnational entities.

ECEC: early childhood education and care.

Practices are ranked in descending order of the average percentage teachers who reported engaging at least monthly in each one.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.9.4.

StatLink  <https://stat.link/35mra0>

Despite these differences by role, around two-thirds or more of staff at both levels of ECEC report engaging in discussions regarding children's development and needs and their evaluation and in co-designing activities for children at least monthly, and typically either weekly or daily. Exchanging materials and carrying out joint activities across groups of children, and particularly providing feedback to other staff about their practices, are relatively less frequent, yet over half of staff report engaging in these activities at least monthly in most countries and subnational entities (Table Staff.42). The pedagogical dimension of most of these activities is then reflected in staff's interactions with children: staff engagement in

professional collaborative practices is the most consistent predictor of them adopting a child-centred approach to structuring and facilitating learning and of daily adaptive pedagogical practices (Table D.5.3; Table D.5.4; see also Chapter 4).

Across activities, staff in New Zealand** and Norway at both levels of ECEC report consistently high levels of collaboration, while pre-primary staff in Colombia and Morocco and staff in the Flemish Community of Belgium and Israel at both levels of ECEC report relatively low levels (Table D.9.4). In all countries and subnational entities, however, staff spend more time planning or preparing play and/or learning activities on their own than together with other staff: in cases like the Flemish Community of Belgium and Spain at the pre-primary level and Quebec (Canada) in settings for children under age 3, more than twice such preparation time is individual rather than collaborative work (Table Staff.28; see also Chapter 4).

In some countries, distributed leadership and leaders' support for staff's pedagogical learning are associated with greater staff engagement in collaborative activities

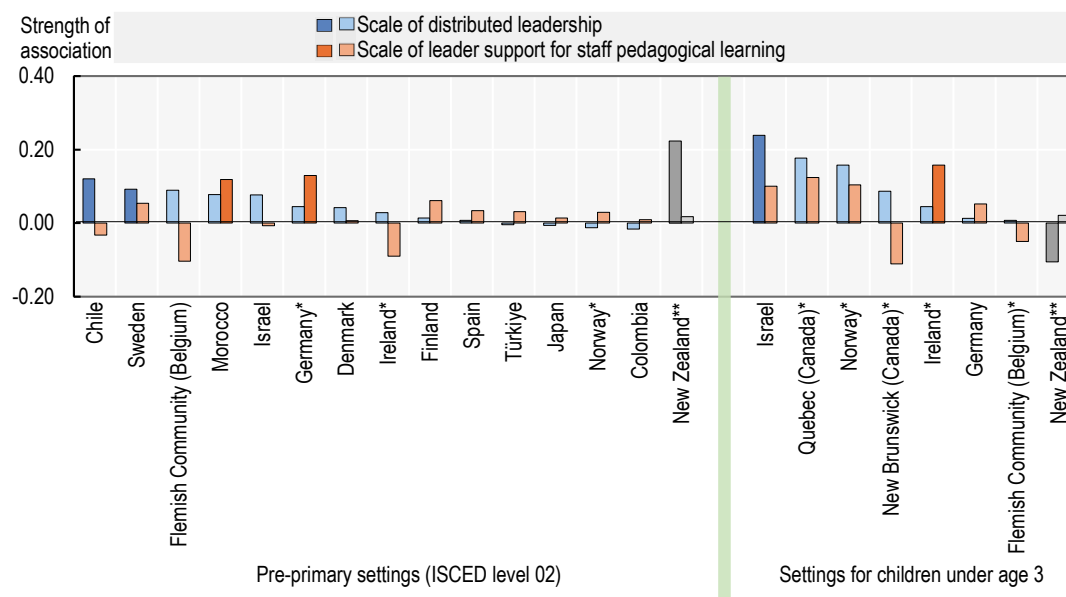
Staff tend to hold very positive views on leaders' contributions to knowledge sharing within settings, with over three-quarters of staff in all participating countries and subnational entities, and at both levels of ECEC, subscribing to the statement that their setting leader promotes a culture of shared professional learning (Table Staff.44). This highlights one of the ways in which setting leaders can play a critical guiding and supporting role for ECEC staff in different aspects of their work (see Chapter 7).

Leaders' support for developing their staff's pedagogical competencies as well as their use of distributed leadership practices (see Chapter 7) are also positively associated with staff engagement in collaborative activities in some participating countries and subnational entities (Figure 9.3). In Germany and Morocco at the pre-primary level and in Ireland in settings for children under age 3, greater leader support for staff pedagogical learning is related to more frequent staff collaboration. In turn, the positive association with distributed leadership holds in Chile and Sweden at the primary level and in Israel in settings for children under age 3. By contrast, leaders' engagement in innovation is generally unrelated to levels of staff collaboration, except in Japan, where this relationship is positive. These results are robust to the consideration of the three types of leadership practices simultaneously as well as to the inclusion of other staff and setting-level characteristics that can be associated with staff's collaborative practices (Table D.9.5). Notably, the size of the setting also bears a positive association with staff's levels of collaboration in some countries and subnational entities, namely the Flemish Community of Belgium (at both levels of ECEC), Morocco and Türkiye (at the pre-primary level), and New Brunswick (Canada) (in settings for children under age 3) (Table D.9.5). This may point to cases where the organisation of work in larger settings creates more opportunities for peer collaboration and/or rests to a greater extent on it; conversely, smaller settings, and especially single-person settings, may provide less such opportunities.

Overall, results suggest a potential to increase staff's levels of engagement in collaborative activities in many of the participating countries and subnational entities. Moreover, a greater focus on the quality of professional collaboration within ECEC settings may bring benefits such as contributing to reducing staff's levels of stress, an expectation not yet met in the majority of ECEC systems (see Chapter 8).

Figure 9.3. Association between leadership practices and staff collaboration in early childhood education and care settings

Change in the scale of staff engagement in collaborative practices associated with a one-unit change in the scale of leader support for staff pedagogical learning and a one-unit change in the scale of distributed leadership



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: Results show unstandardised coefficients from a single multivariable linear regression model. Statistically significant results are indicated in a darker colour. For more information, see Annex C.

Countries and subnational entities, except New Zealand, are ranked in descending order of the strength of the association between staff engagement in collaborative practices and distributed leadership.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.9.5.

StatLink  <https://stat.link/aip16q>

Steering change through monitoring practices

Strong ECEC systems monitor a broad set of outcomes in striving to improve the quality of services for young children and families (Leseman and Slot, 2025^[1]). The systematic tracking of multiple areas of performance can inform improvement processes by promoting a shared understanding of quality standards and identifying the strengths and weaknesses of ECEC services, particularly when complemented with effective setting-level support (OECD, 2022^[3]). Governments face challenges in ensuring the scope of inspections in ECEC aligns with holistic notions of quality and child development (Castro-Kemp and Kemp, 2025^[12]) and in adapting the training and professional roles of inspectors when regulations switch their focus from structural to process aspects of quality (Moshel, 2024^[13]). In higher levels of schooling, inspections are common and tend to be more effective in fulfilling policy enforcement functions than in driving improvement processes, with their impact depending critically on perceptions of accountability pressure and the quality of the inspections (Hofer, Holzberger and Reiss, 2020^[14]). Meanwhile, increasing attention is being paid to the notion that promoting a culture of continuous improvement in ECEC can fruitfully combine “top-down” mechanisms, such as inspections and external evaluations, with “bottom-up” practices, such as internal monitoring and quality self-assessments, at the setting level (OECD, 2022^[3]).

TALIS Starting Strong 2024 asks leaders about the frequency and focal areas of external monitoring in their settings, their own observations and discussions of staff practices, and changes in policies or practices based on monitoring results and external evaluations. These questions can provide insights on monitoring approaches and their contribution to quality improvement processes in ECEC.

External evaluators less frequently monitor process aspects of quality than structural features of quality

In Colombia, Denmark, Israel and Türkiye, 60% or more of pre-primary setting leaders report that staff practices related to process quality (e.g. quality of interactions with children, content of activities) are externally monitored by trained observers at least once every year in their settings (Table 9.2). In contrast, in Finland, the Flemish Community of Belgium, Germany, Norway and Sweden, less than 30% of leaders report this is the case. Differences are greater in settings for children under age 3, as more than 90% of leaders in Israel and New Brunswick (Canada) and less than 30% of leaders in the Flemish Community of Belgium, Germany and Norway report yearly or more frequent monitoring of staff practices.

External monitoring of structural quality features is more frequent across countries, albeit variation exists particularly in settings for children under age 3 (Table 9.2). Aspects of quality such as child-adult ratios, group size or staff qualifications are reported to be externally monitored at least once a year by more than half of pre-primary setting leaders in all participating countries, except in the Flemish Community of Belgium, Ireland and Sweden. In settings for children under age 3, this type and frequency of monitoring is also the highest in Israel and New Brunswick (Canada), as reported by over 90% of leaders, and lowest in the Flemish Community of Belgium, as reported by only 11% of leaders. A broadly similar pattern is observed for the external inspection or monitoring of facilities for meeting health, safety and infrastructure requirements, which is reported as occurring at least once a year or more often by a majority of leaders of pre-primary settings in all participating countries but Finland, Ireland and Norway. The monitoring of financial records (e.g. financial audits) is also common across countries, with a majority of pre-primary leaders reporting their settings receive this type of inspection at least yearly in 10 out of 15 countries and subnational entities participating at this level, as do a majority of leaders of settings for children under age 3 in 5 out of 8 countries and subnational entities (Table D.9.6).

Table 9.2. Frequency of monitoring practices in early childhood education and care settings

Percentage of ECEC settings whose leaders report receiving different types of external monitoring or inspections at least yearly and where setting leaders observe staff practices at least weekly

	External inspection/ monitoring of facilities for meeting requirements (e.g. health, safety)	External inspection/ monitoring of other structural features	External inspection/ monitoring of staff practices by trained observers	External inspection/ monitoring of financial records	I observed ECEC staff practices and staff-child interactions
Pre-primary settings (ISCED level 02)					
Chile	68	53	58	41	67
Colombia	64	59	66	57	55
Denmark	61	56	61	67	79
Finland	31	69	28	62	62
Flemish Community (Belgium)	52	24	12	42	28
Germany*	61	55	22	50	69
Ireland*	43	41	36	47	80
Israel	90	58	80	64	85
Japan	77	68	43	69	80
Morocco	53	50	57	20	59
Norway*	34	65	23	72	46
Spain	61	64	57	56	51
Sweden	62	37	13	51	24
Türkiye	70	70	62	64	44
<i>New Zealand**</i>	44	29	29	52	84
Settings for children under age 3					
Flemish Community (Belgium)*	11	11	16	6	24
Germany	57	55	26	51	66
Ireland*	47	45	42	54	75
Israel	95	90	99	53	90
New Brunswick (Canada)*	96	99	97	45	86
Norway*	43	57	17	64	53
Quebec (Canada)*	62	58	53	47	74
<i>New Zealand**</i>	67	36	42	76	79

* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes:

The shading of the cells applies horizontally to the ranking of the frequency of monitoring practices within countries and subnational entities. Within each country and subnational entity, the most frequent monitoring practices are indicated in darker shades. The least frequent practices are indicated in white. Practices with intermediate frequencies are indicated by intermediate shades. Grey indicates low survey coverage.

ECEC: early childhood education and care.

Activities are presented in order of the least to the most common, on average, across countries and subnational entities.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.9.6 and Table Leader.32.

StatLink  <https://stat.link/dapw71>

It is important to note that there is no a priori optimal frequency of external monitoring in ECEC settings. Countries can choose to monitor certain dimensions of quality less often on average across the system while focusing efforts on specific settings (e.g. risk-based monitoring). However, results suggests that certain aspects of quality are not externally monitored in sizable percentages of settings. For instance, in six countries and subnational entities, 25% or more of pre-primary settings leaders report never being inspected on structural features (e.g. child-adult ratio, group size, staff qualification levels), and the same holds for the monitoring of staff practices (e.g. quality of interaction with children, content of activities); Morocco, Spain and Sweden are included in both groups. Similarly, more than 25% of pre-primary setting leaders in six countries and of leaders of settings for children under age 3 in another five countries and subnational entities report a lack of external inspections or monitoring of their setting's financial records, including Germany and Israel at both levels (Table Leader.34). This suggests that countries are setting different priorities in their monitoring policies, and that inspections focused on process quality can, in some cases, occur in the absence of structural quality or financial inspections.

In some countries, external monitoring is more frequent in private than in public settings

Monitoring is also an important tool to ensure equity goals and steer public investment, for instance by enabling comparisons of quality and inclusion indicators between different types of settings. At the pre-primary level, privately managed settings are more frequently subject to external monitoring practices than publicly managed ones in several participating countries and subnational entities. This is most visible regarding inspections of financial records, which private pre-primary settings receive with greater regularity in 5 out of 11 countries and subnational entities where this comparison can be made (Table D.9.7). In addition, in three of these same countries, various aspects of quality are also more frequently monitored in privately managed settings: in Türkiye regarding requirements on facilities, structural quality features (e.g. child-adult ratios) and staff interactions with children; in Spain regarding facilities and structural quality; and in Finland regarding structural quality. Meanwhile, minimal differences exist in the frequency of external monitoring between public and private settings for children under age 3 (Table D.9.7). These results indicate that, at least at the pre-primary level, more intense external monitoring exists for privately than for publicly managed settings in several countries, particularly with regard to their finances, and presumably in line with accountability demands for public subsidies and quality standards.

Internal monitoring of staff practices by setting leaders is widespread but follow-up feedback exchanges are less prevalent

In 11 out of 15 countries and subnational entities at the pre-primary level and 7 out of 8 of those participating with settings for children under age 3, more than 50% of setting leaders report having observed staff practices and staff-child interactions weekly or more often over the 12 months prior to the survey. In Israel, this reaches more than 80% of leaders at both levels of ECEC, as is the case in Ireland, Japan and New Zealand** at the pre-primary level and in New Brunswick (Canada) in settings for children under age 3 (Table 9.2). While this shows that internal monitoring is a common practice in many ECEC systems, the percentage of settings where leaders report no or less than monthly observations of staff interactions with children remains above 30% in Colombia, Norway and Sweden at the pre-primary level, and at both levels of ECEC in the Flemish Community of Belgium (Table Leader.32).

Sharing feedback with staff is, generally, less prevalent than observations of professional practices. In 6 out of 15 countries and subnational jurisdictions at the pre-primary level and 5 out of 8 for settings for children under age 3, more than 50% of setting leaders report providing feedback to staff based on their observations with a weekly or higher frequency over the 12 months prior to the survey; in Israel for settings for children under age 3 this applies to more than two-thirds of settings. Meanwhile, in Morocco, Norway, Spain and Sweden in pre-primary settings, as well as in the Flemish Community of Belgium at both levels

of ECEC, more than 30% of leaders report more infrequent (i.e. less than a monthly basis) or no feedback exchanges with staff based on observations of their practice (Table Leader.32).

Overall, results point to a relatively underdeveloped culture of internal quality monitoring in ECEC in many of the participating countries and subnational entities, with leaders' observations of staff's professional activities being widespread but insufficiently matched by follow-up feedback exchanges, as both elements are necessary to spark improvement processes in setting-level practices. Internal monitoring practices also need to be considered in light of setting leaders' responsibilities for guiding staff's professional development and the assessment and monitoring of children's outcomes. The provision of effective feedback to staff is indeed one of the areas where setting leaders tend to report a strong need for additional professional development (Table Leader.11).

Leaders make changes to ECEC setting policies and practices based on monitoring results in several countries

The percentage of setting leaders who report frequent changes (i.e. at least monthly over the 12 months prior to the survey) to policies and practices in their ECEC settings based on the results of monitoring and external evaluation varies notably across countries. This applies to around 20% of pre-primary settings in Denmark, Germany and Japan and around 10% of settings for children under age 3 in the Flemish Community of Belgium, compared to around 70% of settings in Israel and New Zealand** at both levels of ECEC (Table D.9.8).

In some countries and subnational entities, pre-primary setting leaders are more likely to report adjustments in policies and practices when their settings receive external inspections in some areas at least once a year. This applies most consistently to Spain, where the frequency of inspections, be it of facilities, structural quality features, staff practices or financial records, is in all cases associated with a higher likelihood of leaders reporting changes in their settings. More frequent inspections of facilities are related to leaders adapting policies and practices in Germany, Morocco and Sweden, while more frequent financial audits are related to changes in Ireland and Morocco and the external monitoring of staff practices is associated with changes in Türkiye (Table D.9.8). Further, a higher frequency of leaders observing staff practices and staff-child interactions is also associated with a higher likelihood of changes to policies and practices in pre-primary settings in Colombia, Finland and Morocco. However, no significant differences are observed in the likelihood of changes based on the frequency of any of the areas of external or internal monitoring in settings for children under age 3 (Table D.9.8).

Overall, the direction of the differences is, in all cases, consistent with the notion that settings' policies and practices are more often adjusted based on the results of monitoring and evaluation activities when such activities, whether conducted by external inspectors or by setting leaders internally, take place more frequently, albeit this association is not statistically significant across all participating countries and subnational entities.

Preparing for digital innovation

A growing number of countries have introduced policies to ensure safe and meaningful uses of digital technologies in ECEC, with goals that include developing children's early digital literacy, enhancing professional development opportunities for ECEC staff or promoting engagement with families, with protecting children from digital risks centre stage (OECD, 2023^[15]; Eurydice, 2025^[16]). An OECD policy survey conducted in 2022 shows that preparing ECEC staff to use digital technologies safely and effectively in their pedagogical work with children, particularly at the pre-primary level, was a high priority for most of the participating countries and subnational entities, but also that digital content is unevenly integrated into initial education and in-service training programmes for ECEC teachers (OECD, 2023^[15]). ECEC

professionals are increasingly confronted with complex questions on whether and how to incorporate digital technologies into their work, especially when interacting with children, and at the same time asked to develop their own digital competencies to implement guiding frameworks (Wilson et al., 2023^[17]; Zabatiero et al., 2018^[18]). However, the implications of introducing digital devices into ECEC and educational settings at large remain an open debate, as evidence exists of both positive experiences and unintended drawbacks (OECD, 2025^[19]).

TALIS Starting Strong 2024 provides information on how ECEC staff and setting leaders engage with digital technologies for various purposes. This chapter focuses on staff preparedness (i.e. initial training, ongoing professional development, perceived need for further professional development and self-efficacy) to use technology specifically to facilitate working with children, as well as on the adequacy of settings' digital infrastructure and staff's views on the need for additional investment. Chapters 6 and 7 discuss the use of digital tools for professional development and management purposes. Chapter 7 also explores other dimensions of innovation in ECEC settings.

A majority of staff have received training on the use of digital technologies to facilitate working with children

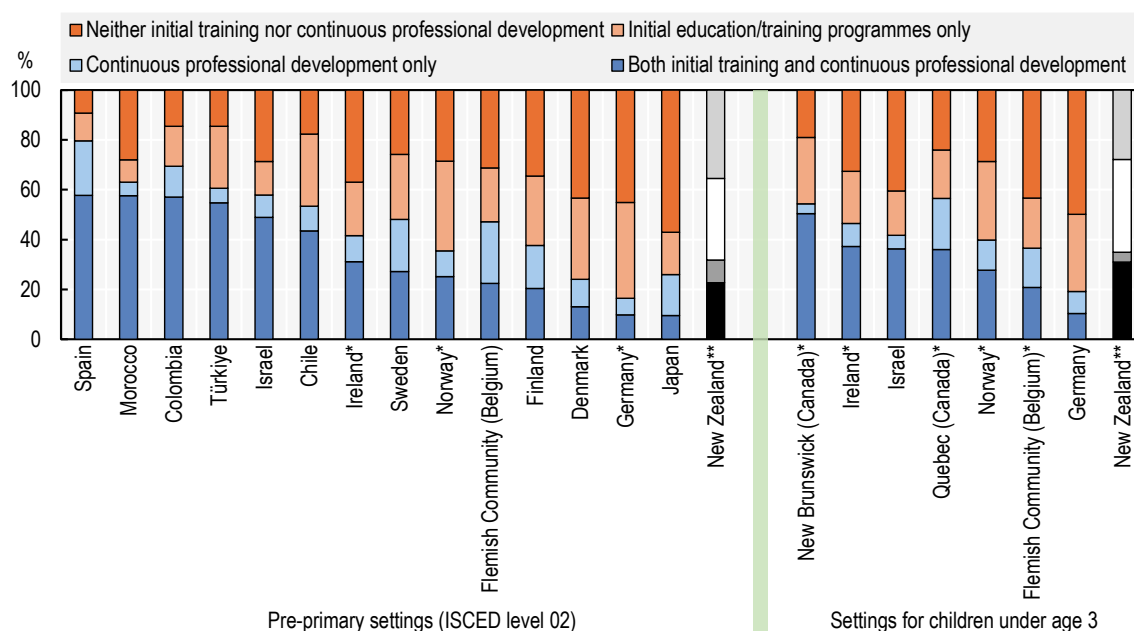
According to staff, initial education or training programmes that included content on the use of digital resources and tools to facilitate working with children are particularly common in Chile, Colombia and Türkiye at the pre-primary level and in New Brunswick (Canada) in settings for children under age 3. In other countries and subnational entities, 40-70% of staff report this kind of training (in pre-primary settings and in settings for children under age 3), except in Japan, where just 25% of staff report having covered uses of digital technology as part of their initial preparation programme (Table D.9.9). To some extent, these patterns may reflect the recentness of initial training in the ECEC workforce: Colombia, New Brunswick (Canada) and Türkiye have relatively high shares of novice staff (with three years of experience or less), whereas staff in Japan are among the most experienced (Table D.2.10).

In the majority of participating countries and subnational entities, and at both levels of ECEC, a smaller proportion of staff report that using digital solutions to facilitate working with children was included in their professional development activities in the 12 months prior to the survey compared to their initial training. Nonetheless, this percentage is over 50% in eight countries and subnational entities across the two levels of ECEC (Table D.9.9).

Combining information on staff's initial preparation programmes and recent training sheds light on the extent to which digital preparedness has become a target for professional development policies in ECEC internationally (Figure 9.4). In 10 out of 15 systems at the pre-primary level and in 5 out of 8 systems in settings for children under age 3, at least 65% of staff have received training on the use of digital tools to facilitate working with children, either in their initial education, ongoing professional development in the 12 months prior to the survey or both (Table D.9.9). By contrast, in Denmark, Germany, Ireland, Japan and New Zealand** at the pre-primary level and in the Flemish Community (Belgium), Germany and Israel in settings for children under age 3, 35% or more of staff report that neither their initial preparation programmes nor their recent professional development activities included such content.

Figure 9.4. Staff training for using digital resources and tools to facilitate working with children

Percentage of staff having covered content on the use of digital resources and tools to facilitate working with children at different stages of their professional development trajectories



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Continuous professional development refers to activities in the 12 months prior to the survey.

Countries and subnational entities, except New Zealand, are ranked in descending order of the percentage of staff who covered the use of digital resources and tools to facilitate working with children in both their initial training and continuous professional development.

Source: OECD (2025), TALIS Starting Strong 2024 Database, Table D.9.9.

StatLink  <https://stat.link/kr6puc>

Staff who covered the use of digital tools with children in both their initial education and recent professional development have a higher sense of self-efficacy in this area

ECEC staff's self-efficacy for using digital technologies to facilitate working with children is generally the area of work about which staff express the least confidence among the areas captured by TALIS Starting Strong 2024, although there are great differences across the participating countries and subnational entities. At the pre-primary level, more than 70% of staff in Morocco, Spain and Türkiye feel they can use these technologies to facilitate working with children “quite a bit” or “a lot” while in Finland, Germany, Japan and Norway this is the case for less than 40% of staff, which mirrors differences across countries in other areas of perceived self-efficacy (Table Staff.24). Confidence for using digital technologies tends to be lower among staff working in settings for children under age 3, with between a third and half of staff reporting strong self-efficacy in this area in all countries and subnational entities except New Brunswick (Canada) and Quebec (Canada), where the percentages are around two-thirds of staff (Table D.9.10).

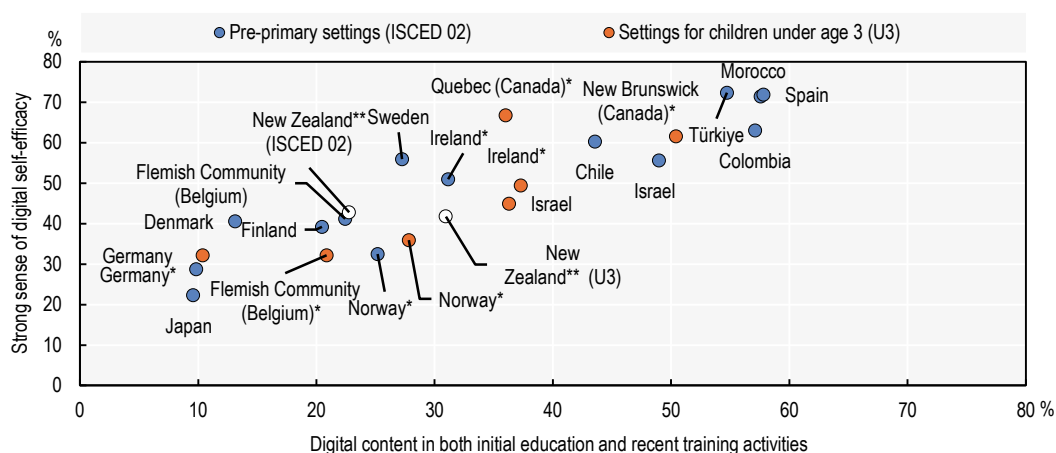
Staff reports about further professional development needs for incorporating digital tools into their work with children provide a complementary perspective. At the pre-primary level, in two-thirds of the participating countries and subnational entities, more than 50% of staff report a “moderate” or “high” level of need in this area. In contrast, this level of need is only reported by staff working in settings for children under age 3 in Norway, where staff typically work in settings with pre-primary aged children as well as

children under age 3 (Table D.9.10). Staff's sense of self-efficacy as well as their views on their need for further professional development likely reflect expectations set in curriculum frameworks regarding the use of digital tools in ECEC, which can partly explain differences between countries and subnational entities as well as between staff at different levels of ECEC. Indeed, in the case of Norway, the curriculum framework (Norwegian Framework Plan for ECEC) encompasses the whole 0-5 age group and emphasises digital practices (Norwegian Directorate for Education and Training, 2017^[20]).

Across participating countries and subnational entities, there is a strong positive system-level association between the percentage of staff who report a high level of confidence in their ability to use digital tools to facilitate working with children and the percentage of staff having covered training content in this area in both their initial and recent ongoing training, both at the pre-primary level and in settings for children under age 3 (Figure 9.5). This suggests that countries and subnational entities where digitalisation is more consistently addressed in professional development programmes tend to have an ECEC workforce that feels better prepared to integrate digital tools into their work in ECEC settings.

Figure 9.5. System-level association between staff self-efficacy for using digital resources in their work with children and cumulative training in this area

Percentage of staff who feel they can use digital resources and tools to facilitate working with children, and percentage of staff having covered content in this area in both their initial training and recent professional development



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B. Notes: Staff who feel they can use digital resources and tools to facilitate working with children are those who reported “quite a bit” or “a lot”, compared with those who reported “not at all” or “to some extent”. Initial training refers to education and training that prepared staff to work with children, and recent professional development refers to activities in the 12 months prior to the survey.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Tables D.9.9 and D.9.10.

StatLink  <https://stat.link/jo5wp9>

Individual-level associations corroborate results at the system level: in many participating countries and subnational entities, staff who covered the use of digital technologies in both their initial education and recent training are more likely to report a strong sense of self-efficacy (Table D.9.11). These staff with training on digital technologies in both initial and recent training are also less likely to express a need for additional training on this topic (Table D.9.12). The relationship with self-efficacy is weaker when staff covered digitalisation-related training content in their initial preparation programmes or in recent training

activities only. This points to high levels of confidence for the use of digital tools in ECEC resulting from more regular exposure to these topics throughout staff professional trajectories, rather than from recent training experiences or the imprint of initial education solely. Given the pace of change in digitalisation and young children's exposure to new technologies, ongoing training at regular intervals is likely particularly important for building on foundational knowledge in this area.

Few leaders perceive their setting's digital infrastructure as a barrier to providing a quality environment for children

At the pre-primary level, less than one in six setting leaders in Finland, the Flemish Community of Belgium, Japan, New Zealand** and Sweden report that shortages or inadequacies of digital resources hinder their setting's capacity to provide a quality environment for children's development, well-being and learning. This concern is somewhat higher in other countries and only shared among most leaders in Colombia and Morocco (Table D.9.13). Leaders' reports about insufficient connectivity being a hindrance to a quality environment closely mirror those on the availability of other digital resources and tools, suggesting the need to address both types of inadequacies in concert. In most of the countries and subnational entities participating at the level of settings for children under age 3, smaller percentages of leaders report challenges due to poor digital infrastructure, which may reflect lower expectations on the need to use digital tools and the Internet to provide quality environments for children under age 3 (Table Leader.42).

Within countries and subnational entities, differences in the reported adequacy of digital resources and connectivity tend to favour private over public settings in the countries where such gaps exist, such as Chile, the Flemish Community of Belgium, Morocco, Norway and Türkiye at the pre-primary level, or Germany at both levels of ECEC (Table D.9.13). Little differences are observed in the adequacy of digital infrastructure depending on the setting's location, although more leaders of settings in small towns or rural areas than in cities report having poor infrastructure in Colombia and Morocco (Table D.9.14). Similarly, the size of the setting appears to be unrelated to the adequacy of digital technology in most participating countries and subnational entities, with the exception of Morocco (Table D.9.15).

When asked about the priority of investing in digital resources if the budget for the ECEC sector as a whole were to increase by 5%, more than half of pre-primary staff in the majority of participating countries and subnational entities consider such investments to be of "somewhat high" or "very high" importance, whereas in Denmark, Finland, Germany, New Zealand**, Norway and Sweden, around a third or less of staff in pre-primary settings share this view (Table D.9.16). Across countries, and both at the pre-primary level and in settings for children under age 3, staff perceptions about the importance of investments in digital equipment appear to be moderately correlated with their reported professional needs or sense of self-efficacy: staff more in favour of such investments tend to also report a higher sense of self-efficacy in this area, potentially reflecting more positive attitudes about extending the use of digital tools in ECEC settings among staff who feel better prepared to use such tools with children. Staff who give greater importance to investments in digital resources also tend to express a greater need for additional professional development in this area, highlighting that availability of or resources for this type of ongoing training may be a perceived barrier to participation for many staff.

Reducing stress from unexpected disruptions

Situations of sudden and significant upheaval, such as natural disasters or public health emergencies, put the adaptative capacity of ECEC systems to the test. Ensuring the continuity and quality of ECEC provision in adverse circumstances requires retaining and supporting ECEC professionals so they can cope with disruptions and continue their work with young children and families (OECD, 2025^[21]). Educational settings, including at the ECEC level, can play an important role in supporting children's emotional recovery post-disaster (Le Brocque et al., 2016^[22]) but adapting to these situations can be highly stressful for ECEC staff

as well (Aydos et al., 2025^[23]). This became visible during the COVID-19 pandemic, which introduced or magnified a range of stressors for the ECEC workforce, with negative effects on their mental health and well-being (Atilas et al., 2021^[24]; Rodriguez et al., 2022^[25]). Protecting ECEC professionals in the event of sudden crises is a concern, as increases in levels of stress and feelings of burnout tend to be associated with plans to leave the sector (Reinke et al., 2025^[26]) (see Chapter 8).

TALIS Starting Strong 2024 provides information on the work climate and well-being of ECEC staff and setting leaders. This section looks at staff and leader reports on the extent to which having to adapt their practices to unexpected disruptions (e.g. natural disasters, public health emergencies/pandemics, humanitarian crises) is a source of stress in their work, and how this varies across different types of ECEC settings (see Chapter 8 for a broader discussion on staff well-being and other sources of stress).

Adapting to unexpected disruptions is more often a source of stress for setting leaders than for staff

Unsurprisingly given their rarer occurrence, unexpected disruptions are less often reported as a source of stress by staff and leaders than most other potential stressors covered in the survey (Tables Staff.47 and Leader.45; see also Chapter 8). Nonetheless, at least 20% of staff in 7 out of 15 participating countries and subnational entities at the pre-primary level and in 3 out of 8 at the level of settings for children under age 3 report that adapting to unexpected disruptions represents “quite a bit” or “a lot” a source of stress in their work. This holds also for setting leaders in a higher number of systems at both levels of ECEC.

The proportion of staff and setting leaders reporting disruption-induced stress is positively correlated across participating countries and subnational entities, which may reflect the relative frequency of these events and ECEC professionals’ levels of preparedness, but also country-specific patterns of response regarding stress factors (see Chapter 8). In a majority of cases, more setting leaders than staff tend to report these disruptions as highly stressful situations. This is most visibly the case in the Flemish Community of Belgium, Ireland, Japan and Norway at the pre-primary level, and in Norway and Quebec (Canada) in settings for children under age 3 (Table D.9.17). A more pronounced impact of disruptions on the stress levels of setting leaders, compared to staff, may reflect the particular dilemmas that leaders face during a crisis, when choices have to be made between competing demands regarding the organisation of ECEC settings (Rørstad Welle and Gunnulfson, 2025^[27]). Nonetheless, in other countries such as Colombia, Denmark or Türkiye, more staff than leaders report high levels of stress related to unexpected disruptions, perhaps related to staff autonomy or aspects of distributed leadership in these systems (see Chapter 7).

Staff with more positive views on their setting leadership are less likely to experience stress from unexpected disruptions while staff more engaged in collaboration are more likely to find disruptions stressful

Among the factors associated with staff experiencing stress from adapting their practice to unexpected disruptions are their overall satisfaction with their setting leadership and their engagement in collaborative practices within their settings (Figure 9.6). However, these associations run in opposite directions. Staff who hold more positive views about their setting leaders are less likely to report higher levels of stress from these situations when working in pre-primary settings in Chile, Finland, the Flemish Community of Belgium, Spain and Sweden, although the opposite is true in settings for children under age 3 in the Flemish Community of Belgium. By contrast, staff more frequently engaged in collaborative practices within their settings are more likely to cite disruptions as highly stressful in Chile, Denmark, Israel and Spain at the pre-primary level and in Ireland in settings for children under age 3. This may reflect stress related to disruptions in usual collaborative practices during times of crisis, or that staff anticipate having a greater

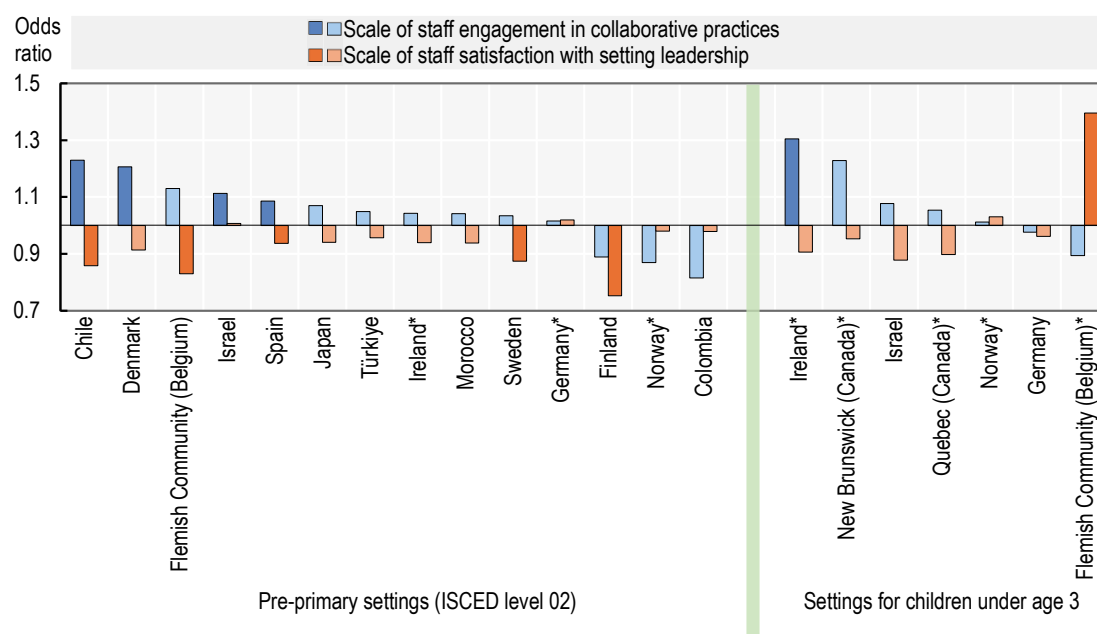
role to play in addressing disruptions due to the collaborative nature of their work; in the latter case, collaboration may feel more like a job demand in times of crisis than a resource (see Chapter 8).

Further, in some cases, other individual-level characteristics appear to be associated with this form of stress among staff. For instance, staff who identify as a teacher or leader, relative to other categories of staff, are more likely to report disruptions as a substantial source of stress in Japan at the pre-primary level, and in Germany, Ireland and Quebec (Canada) in settings for children under age 3 (Table D.9.18).

Overall, results suggest that positive work relationships with setting leaders can be a major buffer to staff's levels of stress in the event of unexpected crises, but also that staff who engage in peer collaboration more regularly and to some extent tend to have greater responsibilities within settings are more likely to confront stressful decisions when severe disruptions occur. This is in line with findings about overall levels of stress and workload increasing with staff's work responsibilities and about setting leadership acting as a protective resource (see Chapter 8).

Figure 9.6. Associations between satisfaction with leadership and engagement in collaboration and staff stress from unexpected disruptions in early childhood education and care settings

Likelihood of staff experiencing stress from adapting to unexpected disruptions associated with a one-unit change in the scale of satisfaction with setting leadership and a one-unit change in the scale of engagement in collaborative practices



* Estimates should be interpreted with caution due to a higher risk of non-response bias.

** Data only represent respondents included in the sample and not the population targeted by the survey. For more information, see Annex B.

Notes: Results show odds ratios from a single multivariable logistic regression model linking the scale of staff engagement in collaborative practices and the scale of staff satisfaction with setting leadership to staff reporting having to adapt their practices with children due to unexpected disruptions (e.g. natural disasters, public health emergencies/pandemics or humanitarian crises) is a source of stress "quite a bit" or "a lot". Statistically significant results are indicated in a darker colour. For more information, see Annex C.

Results do not include New Zealand due to small sample sizes.

Countries and subnational entities are ranked in descending order of the strength of the association between staff engagement in collaborative practices and stress from unexpected disruptions.

Source: OECD (2025), *TALIS Starting Strong 2024 Database*, Table D.9.18.

StatLink  <https://stat.link/t3y5ql>

Several OECD countries are adopting strategies for ECEC services to respond to crises, including through the development of setting-level action plans and training and practical resources to improve staff preparedness and resilience to stress (Box 9.1).

Box 9.1. Coping with disruptions in early childhood education and care: Policies and practices to support settings and staff

Ireland: Responding to critical incidents in ECEC services

In Ireland, the Quality and Regulatory Framework of the Tusla Child and Family Agency, responsible for the Early Years Inspectorate, requires all early childhood education and care (ECEC) settings to have a level plan to respond to critical incidents. These include events such as severe weather, public health emergencies, significant damage to facilities or criminal attacks, but also incidents during outings or the death of a child enrolled in the service. In 2023, a national working group developed a practical guide to assist ECEC settings in establishing those plans (Critical Incident National Working Group with Barnardos, 2024^[28]).

Guidance emphasises reducing the effects of stress and minimising the risk of further problems as key rationales for early and systematic responses to critical incidents. Setting-level plans outline actions to be taken at a time of heightened feelings and anxiety; these actions should be communicated to and understood by staff before crises occur. Critical incident plans cover four key stages: 1) prevention (identifying and managing risks); 2) preparing (identifying appropriate actions); 3) responding (implementing immediate, secondary and follow-up actions); and 4) reviewing (reflecting on the experience as a team and with families and revising the plan). The guide also includes checklists, sample plans, communication templates and other resources to help settings plan for each stage.

City and county childcare committees run training aligned with this guidance and provide support to implement suggested actions. In turn, the Department of Children, Disability and Equality holds responsibility for co-ordinating a national response to critical incidents in ECEC. This involves an exchange of information between local and national levels; local support for ECEC settings and staff; *force majeure* payments for service closure; and sustainability funding for longer support, including extra staffing and therapeutic interventions.

New Zealand: Disaster preparedness in ECEC

In New Zealand, all ECEC services are required to have an emergency management plan in place. These plans must be regularly reviewed and include procedures for emergencies, evacuations, contacting emergency services, and providing medical treatment and assistance (New Zealand Ministry of Education, 2024^[29]). Given New Zealand's diverse natural hazard profile, including earthquakes, floods, landslides, storms, tsunamis and volcanic activity, ECEC services tailor their plans to local risks.

To support rapid communication during emergencies, the Ministry of Education uses a contact tool called Mataara, which enables swift outreach to ECEC settings. Additionally, the National Emergency Management Agency provides resources specifically designed for ECEC settings, including guidance on preparing children for emergencies and advice on how to talk to children about natural hazards. One widely adopted practice is Turtle Safe, a child-friendly version of the "Drop, Cover, and Hold" earthquake drill, which teaches children to respond like a turtle retreating into its shell (Get Ready, n.d.^[30]).

Regional emergency management offices also hold community trainings for ECEC staff. These sessions use short videos, interactive activities and presentations to cover a range of topics, including parent-child reunification procedures and business continuity planning. Emergency preparedness in

ECEC is supported through alignment with New Zealand's National Disaster Resilience Strategy and co-ordination with regional civil defence emergency management groups. The ministry's guidance on managing traumatic incidents highlights the importance of structured support for staff well-being, recommending measures such as buddy systems, relief staffing, regular debriefs, and ongoing monitoring to reduce stress and prevent compassion fatigue.

Policy pointers

- **Strengthen engagement with families and co-operation with other sectors.** Social and institutional connections help ECEC settings to attend to children's needs within their family and community contexts and in synergy with other services, but gaps in communication with families between public and private settings and limited engagement with other sectors and primary schools limit this capacity in many countries. Policies can support ECEC settings' local connections by providing resources for supporting family engagement, particularly in publicly managed settings, and by fostering co-operation with other early years services, independent of the setting's proximity to other institutions. Chile and Colombia, for collaboration with health-related services and home-visits; the Flemish Community of Belgium and Spain, for co-operation with primary schools; and Denmark, Germany and New Zealand, for co-operation across settings and with other support services for young children, illustrate strategies to strengthen institutional connections in ECEC settings.
- **Promote collaborative work practices for all staff within ECEC settings.** Job-embedded peer collaboration is a major avenue for effective professional learning and a consistent predictor of staff's adoption of child-centred and adaptive pedagogical approaches. Policies can support collaborative practices within ECEC settings to provide protected staff time for group work and feedback exchanges, leadership that supports pedagogical learning, staff agency and collaboration among staff, as well as by ensuring that all staff roles (not only teachers) have opportunities to collaborate meaningfully. Staff in New Zealand and Norway strongly engage in multiple collaborative activities. In Chile, Germany, Morocco and Sweden at the pre-primary level, and Ireland and Israel in settings for children under age 3, leadership practices promote staff collaboration.
- **Expand the scope and, where needed, the frequency of quality monitoring activities in support of improvement processes.** Effective monitoring can stimulate quality improvement in ECEC and help ensure equitable access to quality services. Across countries, however, external inspections more often focus on structural aspects than on process quality, while frequent internal monitoring of staff-child interactions is not always followed by guidance to staff. Monitoring policies can give greater attention to process quality alongside structural aspects and focus on quality improvement over accountability, with concrete support for setting leaders, such as making feedback exchanges with staff an integral component of internal monitoring activities. Morocco and Spain are examples of countries where policies and practices in pre-primary settings are more often adjusted based on the results of quality monitoring activities, according to setting leaders.
- **Provide regular training opportunities on the use of digital technology in ECEC settings.** While countries need not necessarily expand digital infrastructure in ECEC settings, the rapid pace of digitalisation makes it critical to ensure staff has up-to-date knowledge on the potential risks and benefits of digital tools for young children and can take informed decisions about integrating them (or not) into their work. Staff's sense of self-efficacy for using digital tools in interactions with children is higher when they have covered this area in both their initial education and ongoing professional development activities, which points to training policies that address digitalisation with

a consistent approach. Colombia, Morocco, Spain and Türkiye at the pre-primary level, and New Brunswick (Canada) in settings for children under age 3, are systems where higher shares of staff have received training in this area both during their initial preparation and recently.

- **Invest in crisis preparedness, including in measures to protect the well-being of ECEC professionals.** Adapting work practices to unexpected disruptions is a substantial source of stress for ECEC staff and setting leaders, with potential negative effects on retention. With the incidence of extreme climate and other events predicted to increase in the near future, policies can aim to improve the preparedness of ECEC settings and staff to respond to crises through training and resources that clarify procedures and responsibilities in adverse circumstances. Ireland and New Zealand provide examples of national strategies to anticipate and improve response to disaster events in ECEC, including requirements for detailed setting-level action plans, training for staff and measures to support the continuity of services (Box 9.1).

References

- Atilas, J. et al. (2021), “International responses to COVID-19: Challenges faced by early childhood professionals”, *European Early Childhood Education Research Journal*, Vol. 29/1, pp. 66-78, <https://doi.org/10.1080/1350293x.2021.1872674>. [24]
- Aydos, E. et al. (2025), “From crisis to classroom: Preschool teachers’ post-earthquake experiences”, *Humanities and Social Sciences Communications*, Vol. 12/1, <https://doi.org/10.1057/s41599-025-04504-9>. [23]
- Castro-Kemp, S. and P. Kemp (2025), “Ofsted inspection reports in early childhood education settings narrowly focussed: A corpus and sentiment analysis”, *Journal of Early Childhood Research*, Vol. 23/2, pp. 197-211, <https://doi.org/10.1177/1476718x241306859>. [12]
- Cramer, T. et al. (2021), “Knowledge dissemination among early childhood staff members: A promising pathway for professional learning”, *Journal of Early Childhood Teacher Education*, Vol. 43/4, pp. 554-567, <https://doi.org/10.1080/10901027.2021.1954567>. [8]
- Critical Incident National Working Group with Barnardos (2024), *Critical Incidents in Early Learning and Care and School-Age Childcare Services: Planning and Responding*, Barnados, Dublin, <http://www.nurturingskills.ie/resources/critical-incidents-in-early-learning-and-care-and-school-age-childcare-services> (accessed on 21 August 2025). [28]
- Eurydice (2025), *Key Data on Early Childhood Education and Care in Europe 2025*, Publications Office of the European Union, <https://eurydice.eacea.ec.europa.eu/publications/key-data-early-childhood-education-and-care-europe-2025>. [16]
- Garner, R., M. Nicholas and E. Rouse (2021), “Cross-sector early years teacher collaboration: Using professional learning workshops as boundary objects for professional boundary crossing”, *European Early Childhood Education Research Journal*, Vol. 29/5, pp. 764-779, <https://doi.org/10.1080/1350293x.2021.1968462>. [6]
- Get Ready (n.d.), “Resources for early childhood centres”, web page, <https://getready.govt.nz/prepared/school/teach/early-childhood-centres> (accessed on 22 August 2025). [30]

- Hofer, S., D. Holzberger and K. Reiss (2020), "Evaluating school inspection effectiveness: A systematic research synthesis on 30 years of international research", *Studies in Educational Evaluation*, Vol. 65, p. 100864, <https://doi.org/10.1016/j.stueduc.2020.100864>. [14]
- Le Brocque, R. et al. (2016), "Schools and natural disaster recovery: The unique and vital role that teachers and education professionals play in ensuring the mental health of students following natural disasters", *Journal of Psychologists and Counsellors in Schools*, Vol. 27/1, pp. 1-23, <https://doi.org/10.1017/jgc.2016.17>. [22]
- Leseman, P. and P. Slot (2025), "Strong early childhood education and care systems for the future: A conceptual framework for thematic analyses", *OECD Education Working Papers*, No. 329, OECD Publishing, Paris, <https://doi.org/10.1787/67d0a97f-en>. [1]
- Liu, M., H. Hedges and M. Cooper (2023), "Effective collaborative learning for early childhood teachers: Structural, motivational and sustainable features", *Professional Development in Education*, Vol. 50/2, pp. 420-438, <https://doi.org/10.1080/19415257.2023.2235578>. [7]
- Moshel, S. (2024), "Reforming inspection of childcare provision: Lessons from Israel", *International Journal of Early Childhood*, Vol. 57/1, pp. 93-114, <https://doi.org/10.1007/s13158-024-00390-5>. [13]
- New Zealand Ministry of Education (2024), "Prepare for an emergency or traumatic incident in early learning", web page, <https://www.education.govt.nz/education-professionals/early-learning/health-and-safety/prepare-emergency-or-traumatic-incident-early-learning> (accessed on 22 August 2025). [29]
- Norwegian Directorate for Education and Training (2017), *Framework Plan for Kindergartens*, <https://www.udir.no/contentassets/7c4387bb50314f33b828789ed767329e/framework-plan-for-kindergartens--rammeplan-engelsk-pdf.pdf>. [20]
- OECD (2025), *How's Life for Children in the Digital Age?*, OECD Publishing, Paris, <https://doi.org/10.1787/0854b900-en>. [19]
- OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/b78f8b25-en>. [5]
- OECD (2025), *TALIS Starting Strong 2024 Conceptual Framework*, OECD Publishing, Paris, <https://doi.org/10.1787/f49228be-en>. [21]
- OECD (2023), *Empowering Young Children in the Digital Age*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/50967622-en>. [15]
- OECD (2022), "Quality assurance and improvement in the early education and care sector", *OECD Education Policy Perspectives*, No. 55, OECD Publishing, Paris, <https://doi.org/10.1787/774688bf-en>. [3]
- OECD (2020), *Building a High-Quality Early Childhood Education and Care Workforce: Further Results from the Starting Strong Survey 2018*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/b90bba3d-en>. [4]
- OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/9789264233515-en>. [2]

- Reinke, W. et al. (2025), "Teacher stress, coping, burnout, and plans to leave the field: A post-pandemic survey", *School Mental Health*, Vol. 17/1, pp. 32-44, <https://doi.org/10.1007/s12310-024-09738-7>. [26]
- Rodriguez, V. et al. (2022), "Silent expectations: An exploration of women pre-Kindergarten teachers' mental health and wellness during Covid-19 and beyond", *Early Childhood Research Quarterly*, Vol. 60, pp. 80-95, <https://doi.org/10.1016/j.ecresq.2021.12.006>. [25]
- Rørstad Welle, K. and A. Gunnulfsen (2025), "School leadership: Dilemmas in dealing with crises", *Educational Management Administration & Leadership*, <https://doi.org/10.1177/17411432251325099>. [27]
- Thornton, K. (2023), "Leadership in professional learning communities: A review of literature", in *International Perspectives on Early Childhood Education and Development, Quality in Early Childhood Education and Care through Leadership and Organizational Learning*, Springer International Publishing, https://doi.org/10.1007/978-3-031-39419-5_11. [10]
- Vandenbroeck, M., J. Lehrer and L. Mitchell (2022), *The Decommodification of Early Childhood Education and Care. Resisting Neoliberalism*, Routledge, London, <http://hdl.handle.net/1854/LU-01GT92CHWTM46H8GAZZWJ60F84>. [11]
- Wilson, S. et al. (2023), "Digital technologies and the early childhood sector: Are we fostering digital capabilities and agency in young children?", *The Australian Educational Researcher*, Vol. 51/4, pp. 1425-1443, <https://doi.org/10.1007/s13384-023-00647-3>. [17]
- Yodogawa, Y., S. Nozawa and K. Akita (2022), "Supporting self-organised professional development in the Japanese context through the Early Childhood Education Quality (ECEQ) initiative", *Early Years*, Vol. 42/1, pp. 71-87, <https://doi.org/10.1080/09575146.2021.2017858>. [9]
- Zabatiero, J. et al. (2018), "Young children and digital technology: Australian early childhood education and care sector adults' perspectives", *Australasian Journal of Early Childhood*, Vol. 43/2, pp. 14-22, <https://doi.org/10.23965/ajec.43.2.02>. [18]

Annex A. Profiles of early childhood education and care systems

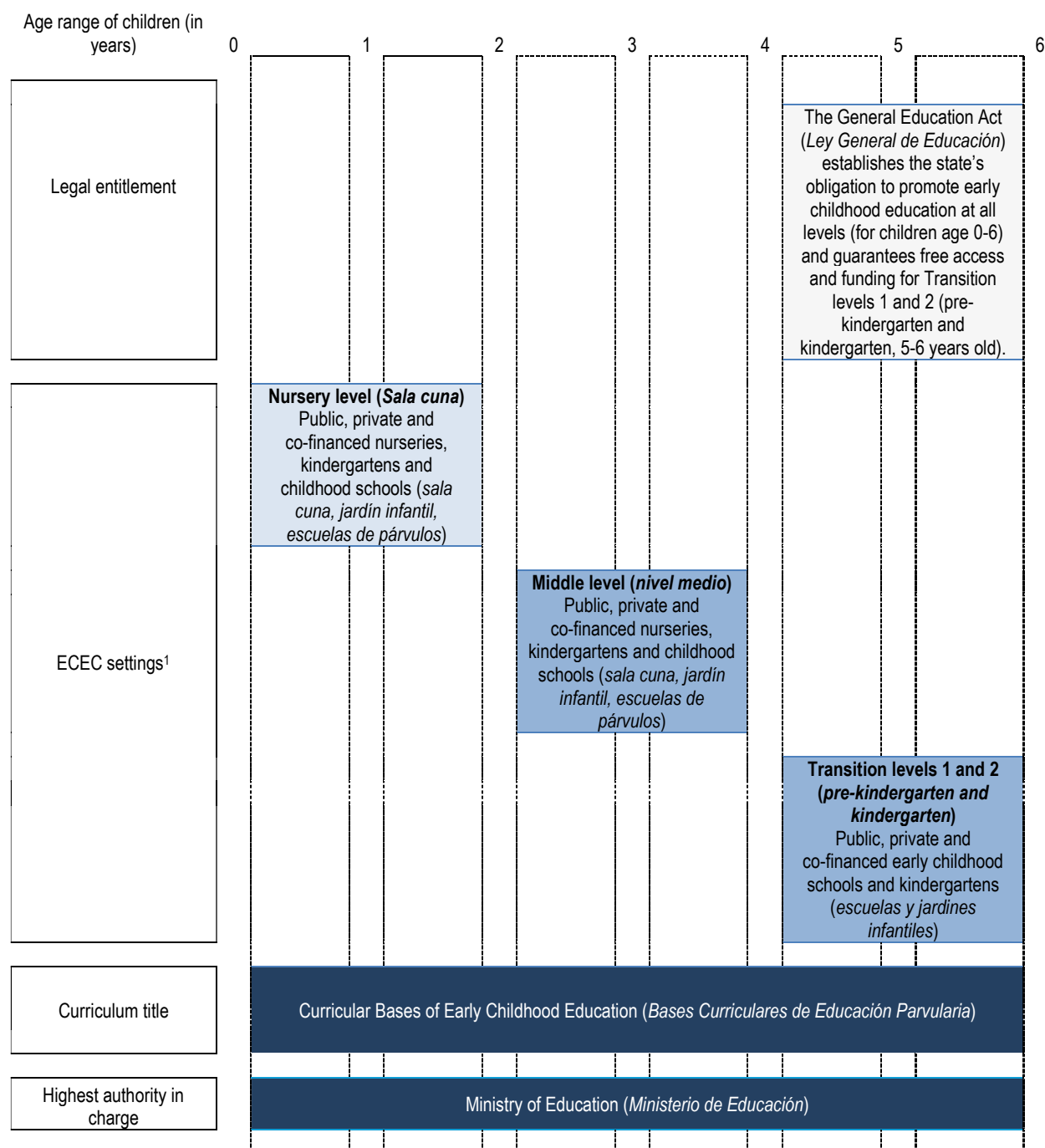
The profiles in this annex provide an overview of early childhood education and care (ECEC) systems across participating countries and subnational entities, to contextualise findings from the Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024. These profiles present system-level data that highlight key policies and structures shaping ECEC provision. The profiles draw primarily from OECD policy questionnaires and indicators, such as those published in *Education at a Glance* and the Starting Strong series. In some cases, supplementary information was provided by participating countries and subnational entities and is noted in the sources at the end of this annex.

Each profile is structured around two core elements:

1. A figure illustrating the organisation of the ECEC system, including legal entitlements to ECEC, the types and age groupings of ECEC settings, the presence of a curriculum or learning framework, and governance arrangements.
2. A table presenting statistical indicators and policy information across six key dimensions:
 - enrolment in ECEC
 - working conditions
 - expenditure and funding
 - governance
 - quality standards
 - workforce development.

Chile

Figure A A.1. Organisation of the early childhood education and care system in Chile



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.1. Overview of early childhood education and care system-level indicators in Chile

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 14 Age 2: 32	Age 3: 54 Age 4: 81 Age 5: 92
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	36 942
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	0
2.3. Total statutory working time for teachers ² per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	1 980
2.4. Statuary net teaching time	2023	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	1 006
3. Expenditure and funding				
3.1. Expenditure on ECEC ³	2022	% of GDP	0.2	0.8
3.2. Expenditure on ECEC per child ³	2022	In equivalent USD converted using PPPs for GDP	8 937	7 863
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	15	19
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	25	25
3.5. Fee regulations and targeted support	Public ECEC services are provided free of charge. For private ECEC services, there is no national framework regulating parental fees in ECEC; subsidised centres receive per-child funding that varies by region, with additional support available for children with special educational needs and those from disadvantaged backgrounds.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	The Ministry of Education (<i>Ministerio de Educación</i>) is responsible for setting a regulatory framework for ECEC settings.			
4.2. Responsibility for monitoring settings	The implementation of the Curricular Bases for Early Childhood Education (<i>Bases Curriculares de la Educación Parvularia</i>) is monitored by the central government, while the implementation of the Framework for Good Teaching at Early Childhood Education (<i>Marco para la Buena Enseñanza de la Educación Parvularia</i>) involves co-ordination across central, regional and local government levels.			
5. Quality standards				
5.1. Group size and child-staff ratios	For all setting types: - For children under age 2: one assistant per 7 children; one teacher per 42 children and one food operator per 40 children. Maximum group size is 21. - For children age 2: one assistant per 25 children and one teacher per 32 children. Maximum group size is 32. - For children age 3: one assistant and one teacher per 32 children. Maximum group size is 32. - For children age 4: one assistant and one teacher per 35 children. If the group size is ten or less, only one teacher is required. According to current regulations, there is no maximum group size. - For children age 5-6: one assistant and one teacher per 45 children. If the group size is 15 or less, only one teacher is required. According to current regulations, there is no maximum group size.			

Indicator	Description
5.2. Coverage of curriculum frameworks	The implementation of the Curricular Bases for Early Childhood Education (<i>Bases Curriculares de la Educación Parvularia</i>) is mandatory for all ECEC settings, while the implementation of the Framework for Good Teaching at Early Childhood Education (<i>Marco para la Buena Enseñanza de la Educación Parvularia</i>) is recommended for all settings.
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	For all ECEC settings, classroom/playroom teachers are required to have an ISCED level 6 education (bachelor's degree).
6.2. Yearly participation in professional development for staff ⁴	For publicly managed and funded kindergartens and for teachers and assistants that work in schools, minimum yearly participation in professional development is required and regulated by the government.

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

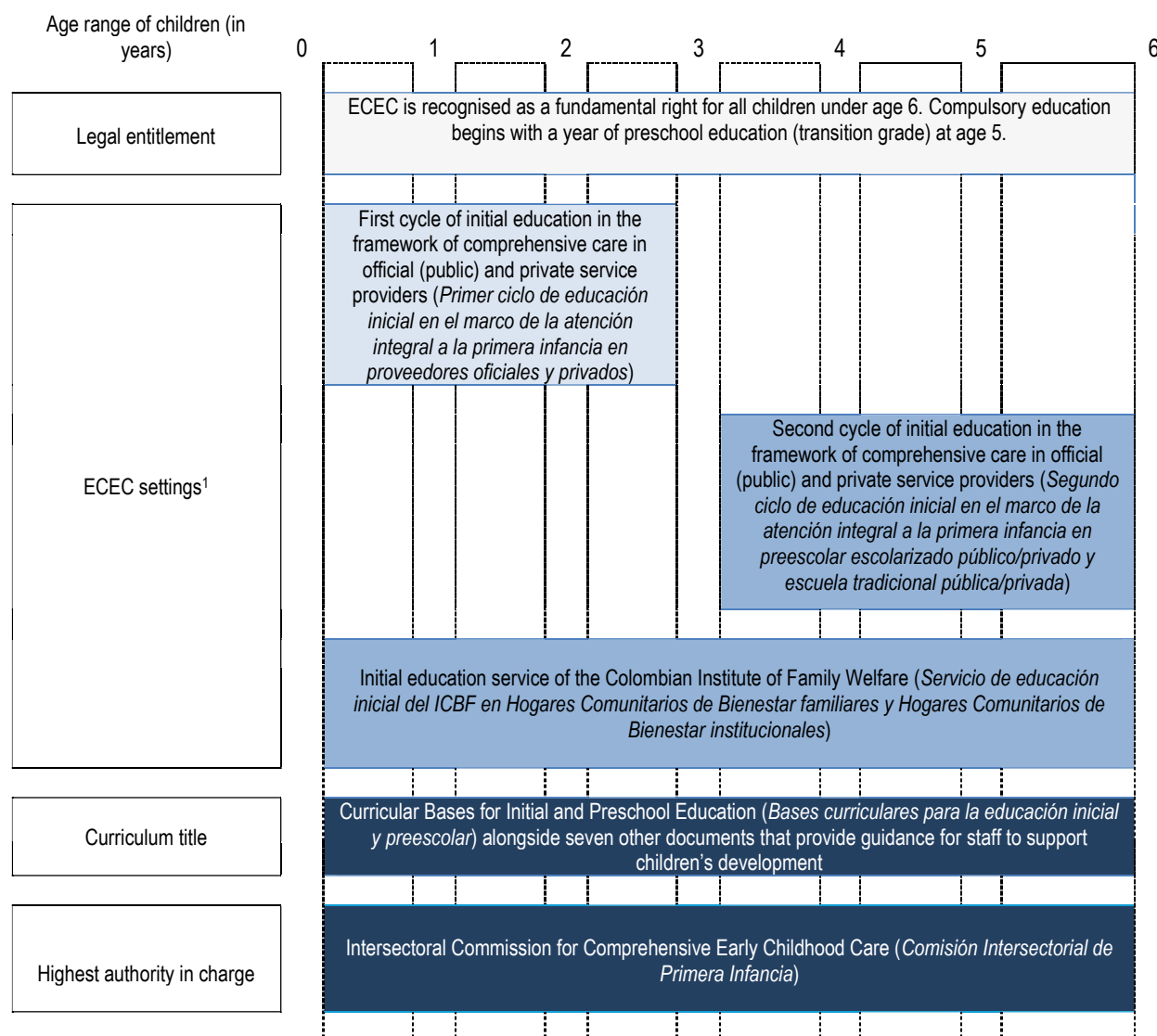
3. Data include education-related expenditure by households spent outside institutions (e.g. books, pencils).

4. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Colombia

Figure A A.2. Organisation of the early childhood education and care system in Colombia



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.2. Overview of early childhood education and care system-level indicators in Colombia

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 3 Age 2: 21	Age 3: 47 Age 4: 71 Age 5: 100
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	57 853
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	0
2.3. Total statutory working time for teachers ³ per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	1 720
2.4. Statuary net teaching time	2023	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	752
3. Expenditure and funding				
3.1. Expenditure on ECEC	2020	% of GDP	0.2	0.4
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	–	–
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	–	–
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	–	–
3.5. Fee regulations and targeted support	ECEC services in official (public) settings are free of charge. Fees for private provision are regulated for the second cycle of initial education.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	The Intersectoral Commission for Comprehensive Early Childhood Care (<i>Comisión Intersectorial de Primera Infancia</i>) is responsible for setting a regulatory framework for ECEC settings.			
4.2. Responsibility for monitoring settings	Monitoring of early childhood settings is conducted through the Comprehensive Development Monitoring System, administered by the Ministry of National Education (<i>Ministerio de Educación Nacional</i>) in co-ordination with the Intersectoral Commission for Comprehensive Early Childhood Care (<i>Comisión Intersectorial para la Atención Integral de la Primera Infancia</i>).			
5. Quality standards				
5.1. Group size and child-staff ratios	- First cycle of initial education Child-staff ratios: - For children aged 3-12 months: 10:1 - For children aged 12-23 months: 10:1 - For children aged 24-36 months: 15:1 - For multi-age groups (6-36 months): 10:1 - If more than 4 children under 23 months are enrolled in multi-age groups, one pedagogical assistant is required. - Second cycle of initial education Child-staff ratios in maximum numbers: - For pre-kindergarten, kindergarten and multigrade second cycle, the ratios are 20:1 in urban settings and 15:1 in rural settings - For transition grades, the ratios vary from 20:1 to 25:1 for urban settings and from 15:1 to 18:1 in rural settings. - For flexible strategies for early childhood education in dispersed rural areas ratios vary from 8:1 to 12:1. - For the ECEC services provided by the Colombian Institute of Family Welfare, the operational structure must comply with the technical manuals applicable to each modality.			

Indicator	Description
5.2. Coverage of curriculum frameworks	The Curriculum Bases for Initial and Preschool Education (<i>Bases curriculares para la educación inicial y preescolar</i>) is a guiding document for teachers in all ECEC settings.
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	For teachers working in the second cycle of initial education, a bachelor's degree or equivalent corresponding to ISCED level 6 is required. Training programmes are recommended to include content-specific knowledge relevant to early childhood education, such as child development, curriculum and pedagogy, and special education. For other ECEC settings, classroom and playroom teachers are required to hold at least an ISCED level 4 qualification, typically a technical degree in early childhood care or education.
6.2. Yearly participation in professional development for staff ³	All providers of ECEC services are encouraged to implement an annual professional development plan for staff.

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes.

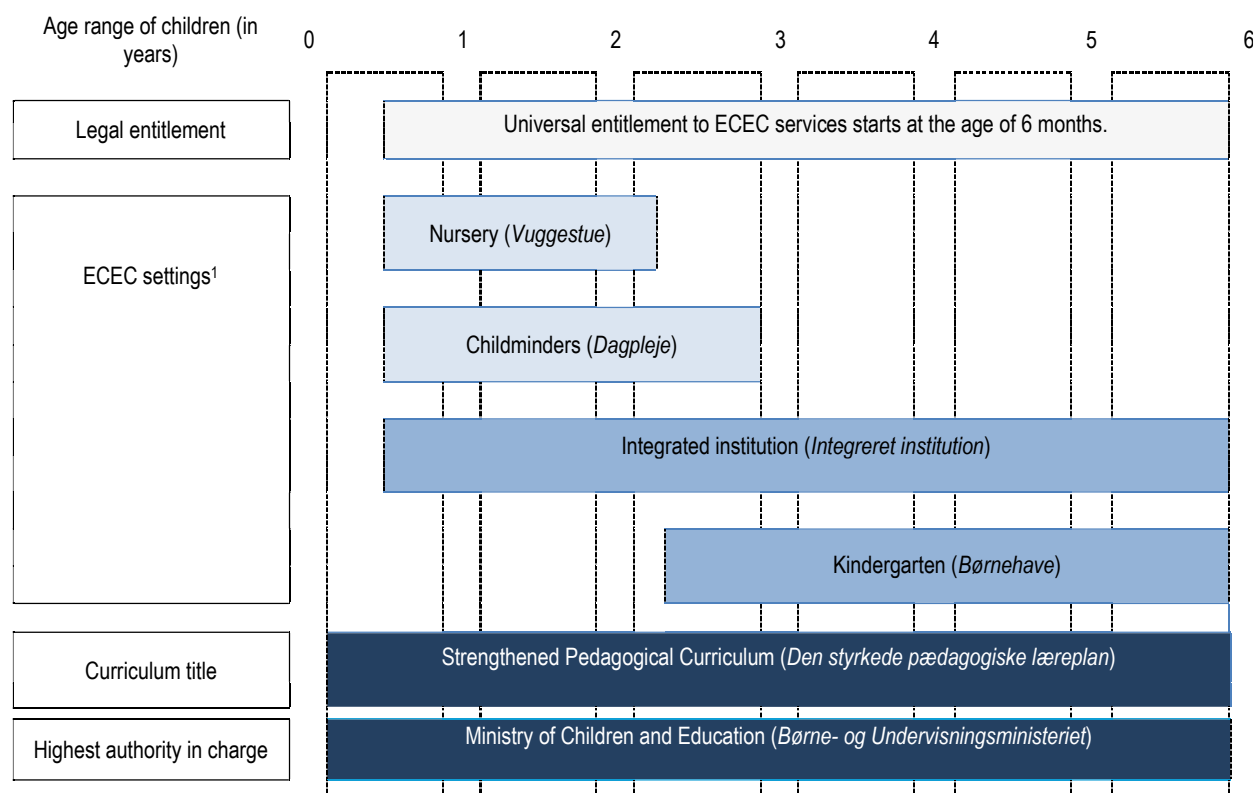
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Denmark

Figure A A.3. Organisation of the early childhood education and care system in Denmark



1. Settings with lighter colours are not included in the TALIS Starting Strong data.

Note: ECEC: early childhood education and care.

Table A A.3. Overview of early childhood education and care system-level indicators in Denmark

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 40 Age 2: 87	Age 3: 95 Age 4: 96 Age 5: 96
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	62 767
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	7 845
2.3. Total statutory working time for teachers ² per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	1 643	1 643
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.6	0.5
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	28 217	13 522
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	24	24
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	100	100
3.5. Fee regulations and targeted support	Entitlement to ECEC free of tuition fees is available based on family income and other factors from 6 months of age to support participation in ECEC.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Ministry of Children and Education (<i>Børne- og Undervisningsministeriet</i>)			
4.2. Responsibility for monitoring settings	National authority			
5. Quality standards				
5.1. Group size and child-staff ratios	For kindergartens, the child-staff ratio is 6:1.			
5.2. Coverage of curriculum frameworks	The Strengthened Pedagogical Curriculum (<i>Den styrkede pædagogiske læreplan</i>) is compulsory for all ECEC settings for all age groups.			
6. Workforce development				
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	To qualify as a classroom/playroom teacher in a kindergarten, nursery or an integrated institution, a bachelor's degree with content-specific knowledge of ECEC is required, corresponding to ISCED level 6.			
6.2. Yearly participation in professional development for staff ³	There is no regulation mandating annual professional development.			

1. Enrolment rates for under age 3 include the number of children enrolled in ISCED 01 and rates for children age 3-5 includes ISCED 02 programmes and primary education, for purposes of international comparison.

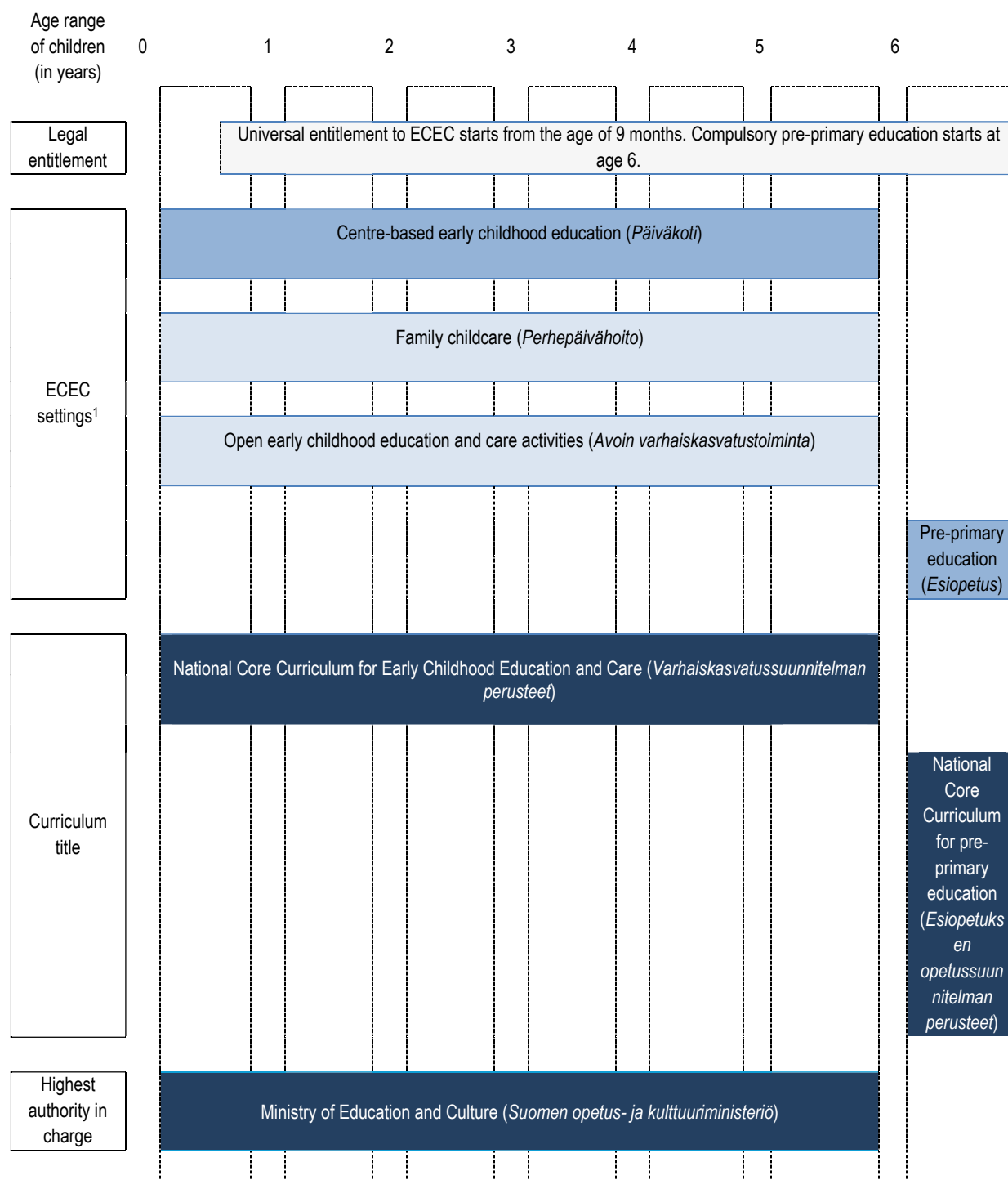
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Finland

Figure A A.4. Organisation of the early childhood education and care system in Finland



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.4. Overview of early childhood education and care system-level indicators in Finland

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 23 Age 2: 74	Age 3: 86 Age 4: 90 Age 5: 91
2. Working conditions				
2.1. Statutory salary of teachers ^{2, 3} after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	42 927
2.2. Gap in statutory salary between teachers ^{2, 3} in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	6 806
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.4	0.8
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	35 051	16 188
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	4	6
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	100	99
3.5. Fee regulations and targeted support	Pre-primary education (<i>esiopetus</i>) (around four hours per day) is free of charge. Children have a legal right to access ECEC before and after pre-primary hours, with fees determined by family income, size and hours of attendance.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Ministry of Education and Culture (<i>Suomen opetus- ja kulttuuriministeriö</i>)			
4.2. Responsibility for monitoring settings	National authority			
5. Quality standards				
5.1. Group size and child-staff ratios	Centre-based early childhood education (<i>päiväkot</i>): - The child-staff ratio for children under age 3 is 4:1, meaning one qualified staff member per four children. The maximum group size is 12 children with 3 staff members. - For children age 3-5, the ratio is 7:1, with a maximum group size of 21 children per 3 staff members. A ratio of 13:1 may be applied if children attend for a maximum of 5 hours per day, with a maximum group size of 39 children; however, such groups do not exist in practice in Finland, despite being permitted by regulation. Family day care (<i>perhepäivähoito</i>): - Each childminder may care for up to four children, plus one part-time child (e.g. a child attending pre-primary education who joins for the afternoon). In group family day care, the same ratio applies, with a maximum of 3 staff members (at least one with higher qualifications) and 12 children in total. Open early childhood education and care activities (<i>avoin varhaiskasvatustoiminta</i>): - There are no regulated child-staff ratios.			
5.2. Coverage of curriculum frameworks	The curricula is compulsory for all ECEC settings. There is no separate curriculum for open ECEC services and family day care; however, the National Core Curriculum for Early Childhood Education and Care (<i>esiopetuksen opetussuunnitelman perusteet</i>) is also applied in these settings, with necessary adaptations.			

Indicator	Description
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	There are no formal educational qualification requirements to become a classroom/playroom teacher in an open ECEC activities setting. In a home-based early childhood education setting, an upper secondary education with content-specific knowledge related to ECEC is required, corresponding to ISCED level 3. To work as a classroom/playroom teacher in either a centre-based early childhood education setting or a pre-primary education setting, a bachelor's degree with content-specific knowledge related to ECEC is required, corresponding to ISCED level 6.
6.2. Yearly participation in professional development for staff ⁴	Yearly participation in professional development for centre-based early childhood education and pre-primary education is regulated.

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

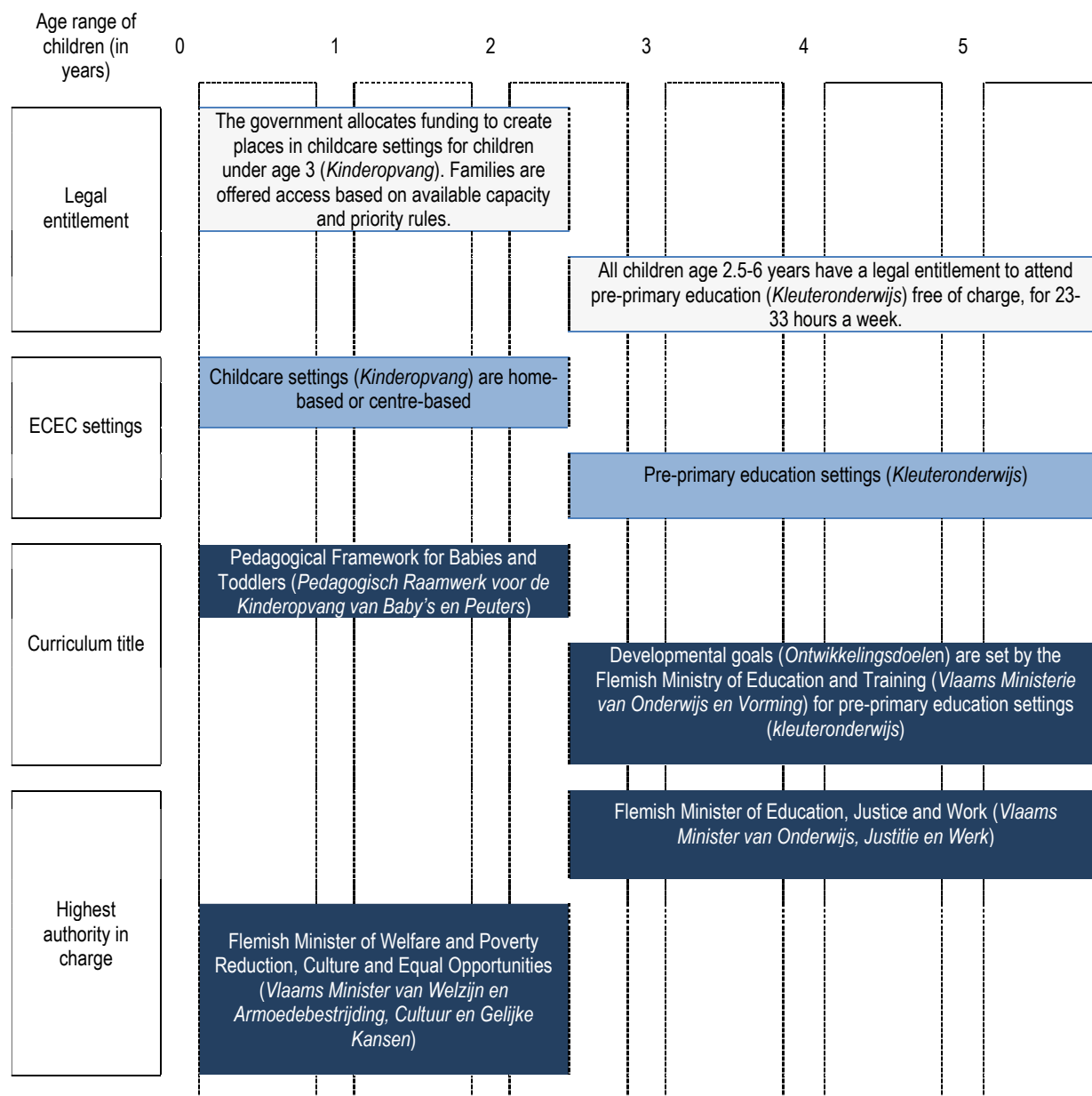
3. Data on pre-primary education include salaries of kindergarten teachers.

4. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Flemish Community of Belgium

Figure A A.5. Organisation of the early childhood education and care system in the Flemish Community of Belgium



Note: ECEC: early childhood education and care.

Table A A.5. Overview of early childhood education and care system-level indicators in the Flemish Community of Belgium

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ^{1, 2}	2024	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 58 Age 2: 40 Under age 3: 51	Age 3: 99 Age 4: 99 Age 5: 99
2. Working conditions				
2.1. Statutory salary of teachers ³ after ten years of experience ²	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	64 809
2.2. Gap in statutory salary between teachers ³ in primary and pre-primary after ten years of experience ²	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	0
2.3. Total statutory working time for teachers ³ per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time ²	2023	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	704
3. Expenditure and funding				
3.1. Expenditure on ECEC ²	2022	% of GDP	–	0.7
3.2. Expenditure on ECEC per child ²	2022	In equivalent USD converted using PPPs for GDP	–	12 979
3.3. Share of private expenditure on ECEC ²	2022	% of expenditure by households and other private entities after transfers from public sources	–	2
3.4. Local government share of expenditure after inter-governmental transfers ²	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	–	7
3.5. Fee regulations and targeted support	In subsidised childcare settings (<i>kinderopvang</i>), parent contributions are income-based. In contrast, settings that do not benefit from any public subsidies, or receive only a public basic funding, have discretion to set their own fees. Pre-primary education (<i>kleuteronderwijs</i>) is provided free of charge, with families only covering the cost of meals.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	- For childcare settings (<i>kinderopvang</i>), the responsibility is with the Flemish Minister of Welfare and Poverty Reduction, Culture and Equal Opportunities (<i>Vlaams minister van Welzijn en Armoedebestrijding, Cultuur en Gelijke Kansen</i>) - For pre-primary education settings (<i>kleuteronderwijs</i>), the responsibility is with the Inspectorate of Educational Quality, which belongs to the Policy domain of Education and Training.			
4.2. Responsibility for monitoring settings	- For childcare settings (<i>kinderopvang</i>), the responsibility is with the Flemish Healthcare Inspectorate in close collaboration with the Agency Opgroeien. - For pre-primary education settings (<i>kleuteronderwijs</i>), the regional and sub-regional governments are in charge of monitoring.			
5. Quality standards				
5.1. Group size and child-staff ratios	For childcare settings (<i>kinderopvang</i>), the child-staff ratios were updated in 2024 and are being implemented with a transition phase until 2027: 5:1 for groups with only children younger than 12 months. 8:1 in groups with only children older than 12 months. 7:1 in mixed groups. For pre-primary education settings (<i>kleuteronderwijs</i>), there is no specified child-staff ratio.			

Indicator	Description
5.2. Coverage of curriculum frameworks	- Childcare settings (<i>kinderopvang</i>) are recommended to implement the pedagogical framework introduced by the Flemish Minister of Welfare and Poverty Reduction, Culture and Equal Opportunities (<i>Vlaams minister van Welzijn en Armoedebestrijding, Cultuur en Gelijke Kansen</i>). - Pre-primary education settings (<i>kleuteronderwijs</i>) are required to develop an educational plan aligned with the developmental goals (<i>ontwikkelingsdoelen</i>) set by the Flemish Ministry of Education and Training (<i>Vlaams Ministerie van Onderwijs en Vorming</i>). These plans need to be approved by the government.
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ³	- In childcare settings (<i>kinderopvang</i>), staff are required to hold a qualification at ISCED level 3, corresponding to secondary vocational education or training, to work as childcare workers. - In pre-primary education settings (<i>kleuteronderwijs</i>), a bachelor's degree in pre-primary education at ISCED level 6 is required to work as a qualified pre-primary teacher.
6.2. Yearly participation in professional development for staff ⁴	Both childcare (<i>kinderopvang</i>) and pre-primary education settings (<i>kleuteronderwijs</i>) are required to provide training in professional development, although there are no requirements on the content, intensity or delivery mode.

1. Enrolment rates cover children enrolled in ECEC services, including ISCED and other registered programmes, for those under age 3, and children enrolled in pre-primary education (ISCED 02) for those age 3-5, for purposes of international comparison. Pre-primary education in the Flemish Community of Belgium also includes children age 6 and the other indicators in this profile reflect the situation for the full age-range of the pre-primary education system.

2. Data reflect regional-level statistics reported for the Flemish Community of Belgium.

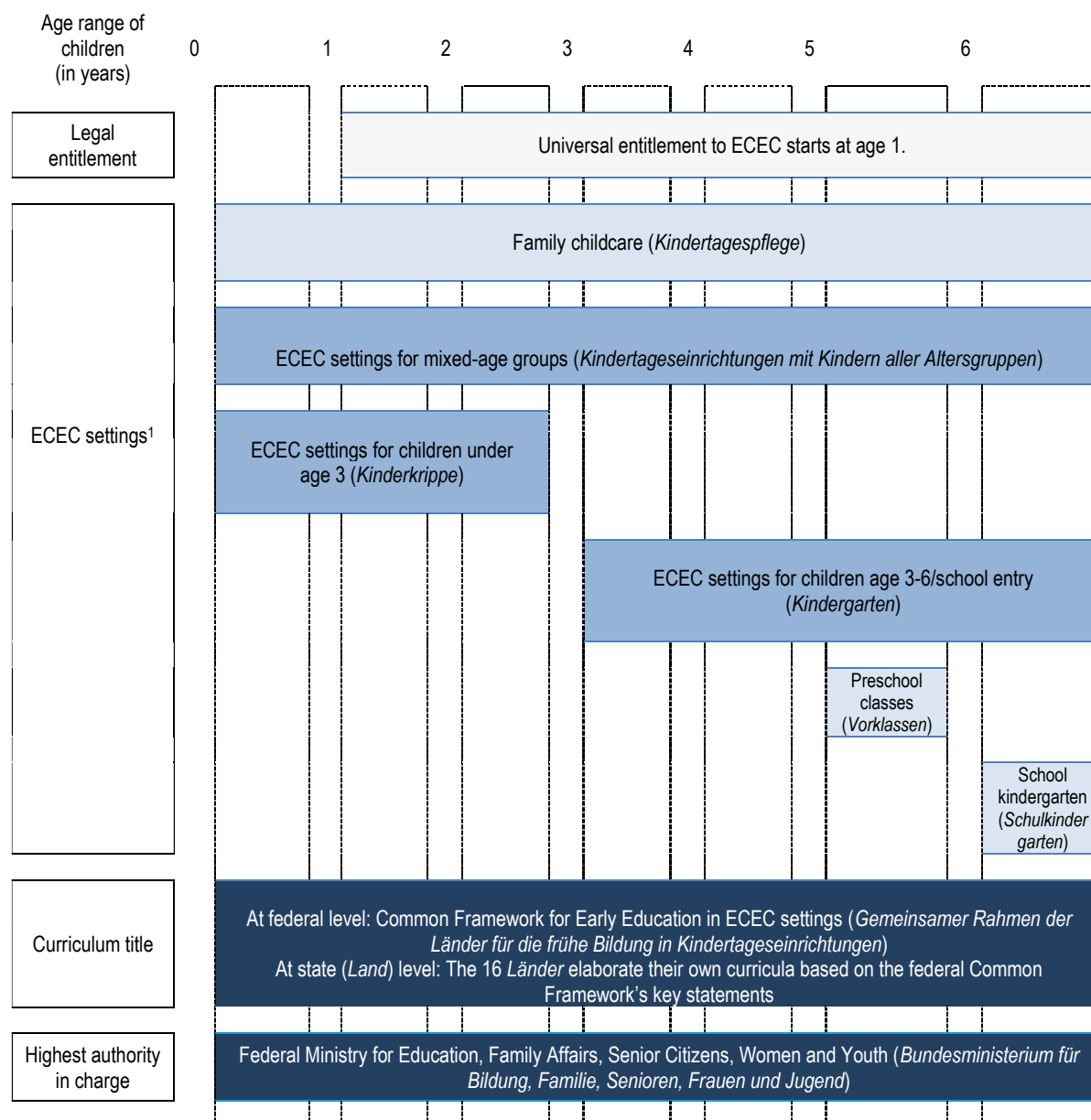
3. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

4. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, childcare professionals, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Germany

Figure A A.6. Organisation of the early childhood education and care system in Germany



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.6. Overview of early childhood education and care system-level indicators in Germany

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2024	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 21 Age 2: 66	Age 3: 88 Age 4: 93 Age 5: 94
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	–	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	–
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	–	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	–
2.3. Total statutory working time for teachers ² per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	1 778
2.4. Statuary net teaching time	2023	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	1 755
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.4	0.7
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	24 546	15 167
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	16	9
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	84	87
3.5. Fee regulations and targeted support	Regulations on parental fees vary across federal states. In some states, such as Berlin and Mecklenburg-Western Pomerania, fees have been fully removed for both centre-based and family childcare. Other states waive fees for children age 3 and above (e.g. Brandenburg, Bremen, Lower Saxony) or offer fee-waivers for a specific amount/number of hours, either across all age groups (e.g. Hamburg) or specifically for children over age 3 (e.g. Hesse). In Saxony-Anhalt, parents are required to pay contributions only for their oldest child enrolled in ECEC. In addition, all federal states are required to apply socially staggered contributions for ECEC, typically based on household income, number of children or hours of attendance, although the specific rules differ across states. Low-income families receiving child allowance or social benefits (e.g. housing or unemployment allowance, or asylum seekers benefits) are generally exempted from paying fees.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Subnational authorities (<i>Länder</i> /federal states) are responsible for setting a regulatory framework.			
4.2. Responsibility for monitoring settings	The responsibility for monitoring ECEC settings lies with the 16 federal states (<i>Länder</i>), each of which have differing approaches that can involve different levels of local/sub-regional and regional oversight.			
5. Quality standards				
5.1. Group size and child-staff ratios	Regulations regarding group size and child-staff ratios are determined by each of the 16 federal states (<i>Länder</i>) and differ significantly across states.			
5.2. Coverage of curriculum frameworks	The Common Framework for Early Education in ECEC settings (<i>Gemeinsamer Rahmen der Länder für die frühe Bildung in Kindertageseinrichtungen</i>) sets out common principles for pedagogical practice across the country. However, each federal state also maintains its own curriculum framework, which differ in their coverage of ECEC settings.			
6. Workforce development				
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	- For family childcare settings (<i>kindertagespflege</i>), a pedagogical qualification of any sort, typically the qualification course to work in family childcare, is required as a minimum (minimum 160-hour course, alternatively a 300-hour course or a higher qualification). - For all other ECEC setting types, a degree equivalent to a bachelor's including content-specific knowledge to ECEC is required, corresponding to an ISCED level 6.			

Indicator	Description
6.2. Yearly participation in professional development for staff ³	- For family childcare (<i>kindertagespflege</i>), regulations are set at the state level. In most states, annual participation in professional development is required (e.g. Bavaria, North Rhine-Westphalia, Hesse, Saxony-Anhalt, Mecklenburg-Western Pomerania). - For ECEC settings for mixed age groups (<i>kindertageseinrichtungen mit Kindern aller Altersgruppen</i>), children under age 3 and children age 3-6, yearly participation in professional development for staff is required and regulated.

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes. Pre-primary education in Germany also includes children age 6 and the other indicators in this profile reflect the situation for the full age-range of the pre-primary education system.

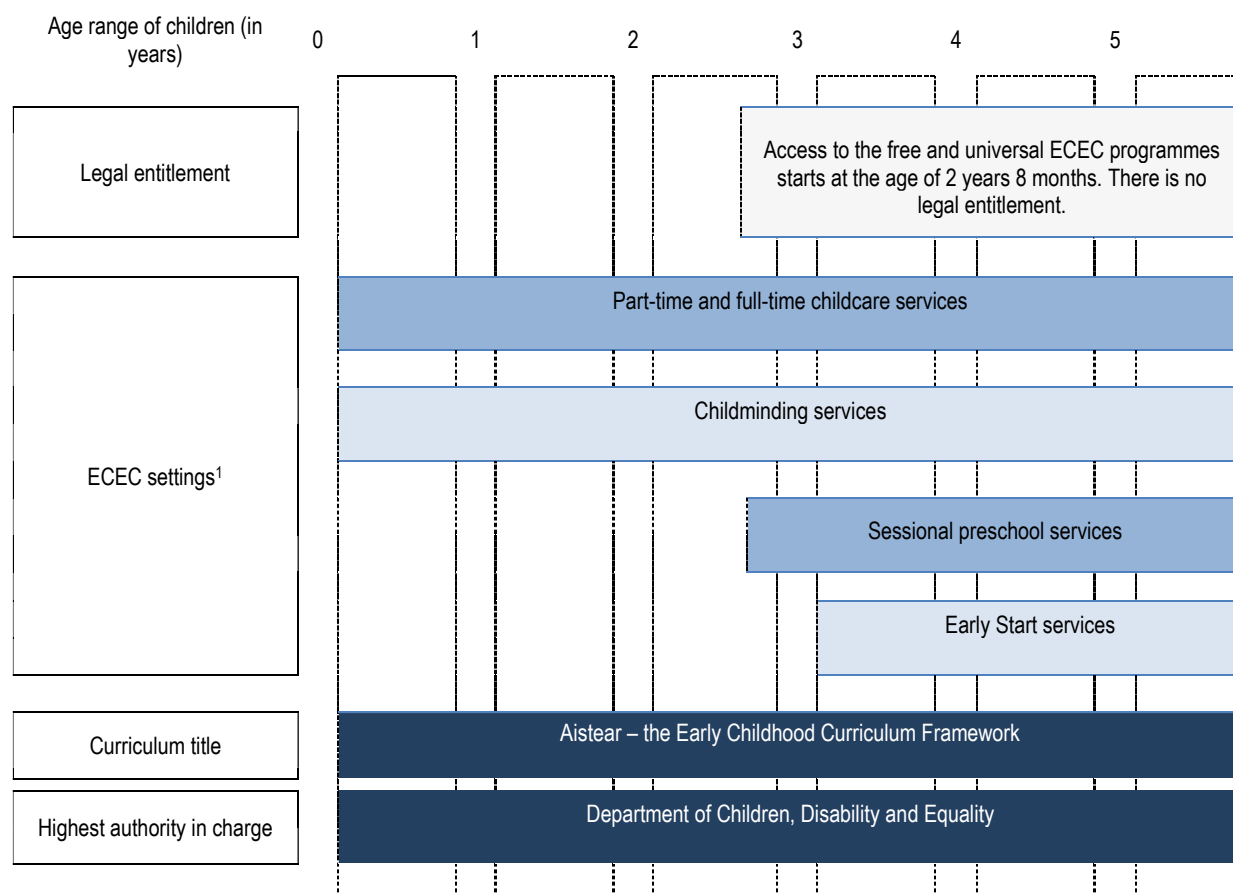
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Ireland

Figure A A.7. Organisation of the early childhood education and care system in Ireland



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.7. Overview of early childhood education and care system-level indicators in Ireland

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 12 Age 2: 32	Age 3: 91 Age 4: 94 Age 5: 99
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	–	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	–
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	–	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	–

Indicator	Year	Description	Under age 3	Age 3-5
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.2	
3.2. Expenditure on ECEC per child	–	In equivalent USD converted using PPPs for GDP	–	
3.3. Share of private expenditure on ECEC	–	% of expenditure by households and other private entities after transfers from public sources	–	
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	0	
3.5. Fee regulations and targeted support	Universal and targeted subsidies, based on family income and other factors, are available for children from 6 months of age to support participation in ECEC. These subsidies cover hours beyond those provided by “Early Childhood Care and Education programme”, which provides 2 years of free preschool provision (15 hours per week during term-times).			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Department of Children, Disability and Equality			
4.2. Responsibility for monitoring settings	National authority			
5. Quality standards				
5.1. Group size and child-staff ratios	Child-staff ratios: - for 0-1-year olds: 3:1 - for 1-2-year-olds: 5:1 - for 2-3-year-olds: 6:1 - for 3-5-year-olds: 8:1 for full-time and part-time care and 11:1 for sessional care (up to 3.5 hours per day). Group size: ECEC settings that only provide a “sessional preschool service” (catering for 3-5-year-olds for up to 3.5 hours per day) can have no more than 22 children in a room at a time. This requirement does not apply if the service involves full-time care.			
5.2. Coverage of curriculum frameworks	The curriculum framework is recommended for use across all ECEC settings and age groups.			
6. Workforce development				
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	- To qualify as a classroom/playroom staff (including teachers) in centre-based ECEC settings, post-secondary non-tertiary education is required, corresponding to ISCED level 4. - There is no qualification requirement for home-based ECEC settings, except for a requirement to complete a short pre-registration training course.			
6.2. Yearly participation in professional development for staff ³	Yearly participation in professional development for staff in centre-based settings is neither regulated nor required.			

1. Enrolment rates include the number of children enrolled in ISCED 01 programmes for those under age 3, and pre-primary (ISCED 02) and primary education (ISCED 1) for those aged 3-5, for purposes of international comparison.

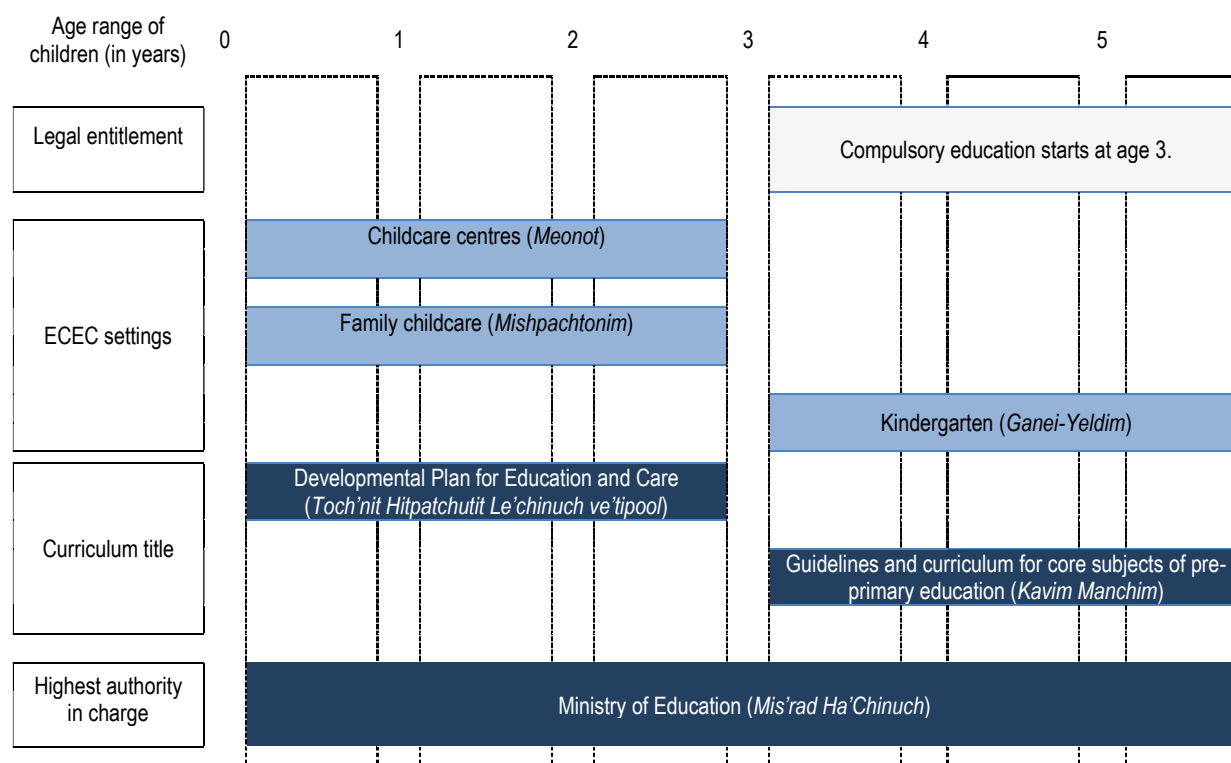
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childcare education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Israel

Figure A A.8. Organisation of the early childhood education and care system in Israel



Note: ECEC: early childhood education and care.

Table A A.8. Overview of early childhood education and care system-level indicators in Israel

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 50 Age 2: 76	Age 3: 100 Age 4: 99 Age 5: 97
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	45 514
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	6 632
2.3. Total statutory working time for teachers ² per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	1 047

Indicator	Year	Description	Under age 3	Age 3-5
2.4. Statuary net teaching time	2023	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	1 011
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.3	0.9
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	4 377	7 863
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	72	10
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	37	52
3.5. Fee regulations and targeted support	For children age 0-3, access to subsidised ECEC is available for up to 50 hours per week (approximately 40% of all registered centre-based settings). If there are more children than there are places available, an admission committee will assess children's needs against priority criteria.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	The Ministry of Education (<i>Mis'rad Ha'Chinuch</i>) is responsible for setting a regulatory framework for ECEC settings.			
4.2. Responsibility for monitoring settings	The Ministry of Education's (<i>Mis'rad Ha'Chinuch</i>) supervisors.			
5. Quality standards				
5.1. Group size and child-staff ratios	For childcare centres (<i>meonot</i>), the child-staff ratio is 6:1 for children under the age of 15 months; 9:1 for children under age 2; 9:1 for children age 2-3. For family childcare (<i>mishpachtonim</i>), the child-staff ratio is 5:1 in publicly managed settings and 6:1 in privately managed settings. For formal (publicly managed) and unofficial (privately managed) kindergartens (<i>ganei-yeldim</i>), group size is limited to 35 children. Child-staff ratios are 30:1 for teachers and 1 assistant for up to 30 children and 35:1 for teachers and 2 assistants for 30-35 children.			
5.2. Coverage of curriculum frameworks	The guidelines for pre-primary education are compulsory for kindergartens. For settings for children under age 3, compliance with the developmental plan provided by the Ministry of Education (<i>Mis'rad Ha'Chinuch</i>) is one of the criteria assessed by supervisors.			
6. Workforce development				
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	- To qualify as a classroom/playroom teacher in a kindergarten (<i>ganei-yeldim</i>), a bachelor's degree in early childhood education is required, corresponding to ISCED level 6. - In Ultra-Orthodox settings, teachers are required to complete a culturally adapted programme, corresponding to ISCED level 5. - To qualify as a classroom/playroom teacher or assistant in a nursery (only in childcare centres (<i>Meonot</i>)), completion of 220 hours of childcare training offered by the Ministry of Education (<i>Mis'rad Ha'Chinuch</i>) is required, corresponding to ISCED level 4.			
6.2. Yearly participation in professional development for staff ³	For all ECEC settings, minimum yearly participation in professional development is a common practice but not required by the government.			

1. Enrolment rates include the number of children enrolled in ISCED 01 programmes for those under age 3, and pre-primary (ISCED 02) and primary education (ISCED 1) for those age 3-5, for purposes of international comparison.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Japan

Figure A A.9. Organisation of the early childhood education and care system in Japan

Age range of children (in years)	0	1	2	3	4	5
Legal entitlement				Universal entitlement to ECEC with some free tuition starts at age 3.		
ECEC settings	Daycare centre (<i>Hoikusho</i>)					
	Centre for early childhood education and care (<i>Ninteikodomoen</i>)					
				Kindergarten (<i>Youchien</i>)		
Curriculum title	National Curriculum Standard for Day Care Centre (<i>Hoikusho Hoiku Shishin</i>)					
	National Curriculum Standard for Centre for Early Childhood Education and Care (<i>Youhorenkeigata Nintei Kodomoen Kyoiku Hoiku Youryo</i>)					
				National Curriculum Standards for Kindergarten (<i>Youchien Kyoiku Youryo</i>)		
Highest authority in charge	Children and Families Agency (<i>Kodomokateichou</i>)					
	Ministry of Education, Culture, Sports, Science and Technology (<i>Monbukagakushou</i>)					

Note: ECEC: early childhood education and care.

Table A A.9. Overview of early childhood education and care system-level indicators in Japan

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 32 Age 2: 74	Age 3: 91 Age 4: 98 Age 5: 99
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	–	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	–
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	–	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	–
2.3. Total statutory working time for teachers ² per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	1 728
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC ³	2022	% of GDP	–	0.2
3.2. Expenditure on ECEC per child ³	2022	In equivalent USD converted using PPPs for GDP	–	10 180
3.3. Share of private expenditure on ECEC ³	2022	% of expenditure by households and other private entities after transfers from public sources	–	22
3.4. Local government share of expenditure after inter-governmental transfers ³	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	–	73
3.5. Fee regulations and targeted support	Universal entitlement to some ECEC free of tuition fees. Public kindergartens, daycare centres, centres for early childhood education and care, and municipal-level childcare services are provided free of charge for all children age 3-5 as well as for some children from low-income households age 0-2. Private settings are free up to the same amount as public settings.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	- The Children and Families Agency (<i>Kodomokateichou</i>) is responsible for daycare centres (<i>hoikusho</i>) and centres for early childhood education and care (<i>ninteikodomoen</i>). - The Ministry of Education, Culture Sports, Science and Technology (<i>Monbukagakushou</i>) is responsible for centres for early childhood education and care (<i>ninteikodomoen</i>) and kindergartens (<i>youchien</i>).			
4.2. Responsibility for monitoring settings	In daycare centres (<i>hoikusho</i>) and centres for early childhood education and care (<i>ninteikodomoen</i>), monitoring is carried out both at the regional, sub-regional and setting levels. In kindergartens (<i>youchien</i>), monitoring is carried out by the national government, regional or sub-regional authorities, school corporations, and social welfare corporations, which are the entities that establish and approve them.			

Indicator	Description
5. Quality standards	
5.1. Group size and child-staff ratios	- Daycare centre (<i>hoikusho</i>) Group size: – Child-staff ratios: - For children under age 1: 3:1. - For 1- to 2-year-olds: 6:1. - For 3-year-olds: 15:1. - For 4- to 5-year-olds: 25:1. - Centres for early childhood education and care (<i>ninteikodomoen</i>) Group size: maximum 35 children for ages 3-5 Child-staff ratios: - For children under age 1: 3:1. - For 1- to 2-year-olds: 6:1. - For 3-year-olds: 15:1. - For 4- to 5-year-olds: 25:1. - For children over age 3: 1 ECEC teacher per class. - Kindergartens (<i>youchien</i>) Group size: no more than 35 children. Child-staff ratios: 1 teacher per class.
5.2. Coverage of curriculum frameworks	The curriculum corresponding to each type of ECEC setting is mandatory across all setting types.
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	To qualify as a classroom/playroom teacher in any of the ECEC settings, a short-cycle tertiary degree with content-specific knowledge to ECEC is required, corresponding to ISCED level 5.
6.2. Yearly participation in professional development for staff ⁴	In daycare centres (<i>hoikusho</i>), centres for early childhood education and care (<i>ninteikodomoen</i>), and kindergartens (<i>youchien</i>), yearly participation in professional development for staff is common practice and recommended. In the public sector, kindergarten teachers and ECEC teachers in centres for early childhood education and care are obligated to participate in statutory professional development such as induction training.

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Data do not cover daycare centres or centres for early childhood education and care.

4. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Morocco

Figure A A.10. Organisation of the early childhood education and care system in Morocco

Age range of children (in years)	0	1	2	3	4	5
Legal entitlement	There is no legal entitlement to ECEC and it is not compulsory in Morocco.					
ECEC settings ¹	Nurseries and daycare settings دور الحضانة (Crèches/jardins d'enfants) Public-partnered preschool التعليم الأولي العمومي المسير من طرف شركاء القطاع (Préscolaire public géré par les partenaires) Private nursery schools التعليم الأولي الخصوصي (Préscolaire privé) Traditional Quranic schools (Kouttab, M'sid) التعليم الأولي التقليدي (الكتاب، المسجد) (Préscolaire traditionnel [Kouttab, M'sid]) Unregulated preschools التعليم الأولي غير المهيكل (Préscolaire non structuré)					
Curriculum title	National Curriculum Framework for Preschool Education الإطار المنهجي للتعليم الأولي (Cadre curriculaire national de l'enseignement préscolaire)					
Highest authority in charge	Ministry of Solidarity, Social Integration and Family (Ministère de la Solidarité, de l'Insertion sociale et de la Famille)/Entraide Nationale; Ministry of Youth, Culture, and Communication (Ministère de la Jeunesse, de la Culture et de la Communication) Ministry of National Education, Preschool and Sports (Ministère de l'Éducation Nationale, du Préscolaire et des Sports) Ministry of Habous and Islamic Affairs (Ministère des Habous et des Affaires Islamiques)					

1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.10. Overview of early childhood education and care system-level indicators in Morocco

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: – Age 2: –	Age 3: – Age 4-5: 71
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	–	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	–
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	–	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	–
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC	–	% of GDP	–	–
3.2. Expenditure on ECEC per child	–	In equivalent USD converted using PPPs for GDP	–	–
3.3. Share of private expenditure on ECEC	–	% of expenditure by households and other private entities after transfers from public sources	–	–
3.4. Local government share of expenditure after inter-governmental transfers	–	% of local governments' share of expenditure after inter-governmental transfers (final funds)	–	–
3.5. Fee regulations and targeted support	Public preschool classes (age 4-5) (التعليم الأولي العمومي المسير من طرف شركاء القطاع) are free of charge; private provision is fee-based. Targeted programmes (e.g. through partnerships) support expansion in disadvantaged areas. Private provision (age 0-3) is fee-based.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Regulation is led by national authorities, with responsibilities split across types of provision: - Public-partnered preschool education (التعليم الأولي العمومي المسير من طرف شركاء القطاع) is under the supervision of the Ministry of National Education, Preschool and Sports, but delegated to associations and foundations. - Private preschool is authorised by the Ministry of National Education, Preschool and Sports. - Traditional Quranic schools (Kouttab, M'sid) (التعليم الأولي التقليدي (الكتاب، المسجد)) are linked to the Ministry of Habous and Islamic Affairs. - Nurseries and social care services partly fall under the Entraide Nationale within the Ministry of Solidarity, Social Integration and Family and the Ministry of Youth, Culture and Communication.			
4.2. Responsibility for monitoring settings	Monitoring is led by national authorities, with responsibilities split across types of provision: - Public-partnered preschool (التعليم الأولي العمومي المسير من طرف شركاء القطاع) classrooms and most private preschools are monitored by the Ministry of National Education, Preschool and Sports. - Traditional Quranic schools (التعليم الأولي التقليدي) (Kouttab, M'sid) are overseen by the Ministry of Habous and Islamic Affairs. - Nurseries/daycare (دور الحضانة) are overseen in part by Entraide Nationale within the Ministry of Solidarity, Social Integration and Family and the Ministry of Youth, Culture and Communication. - Unregulated preschool settings (التعليم الأولي غير المهيكل) have uneven or no systematic supervision.			

Indicator	Description
5. Quality standards	
5.1. Group size and child-staff ratios	The average child-to-staff ratio is 18.8 (2023/2024); ratios vary by region and provider.
5.2. Coverage of curriculum frameworks	The National Curriculum Framework is being rolled out in public-partnered classrooms; most unregulated kindergartens and traditional Quranic schools (<i>Kouttab, M'sid</i>) remain outside its formal scope. The National Curriculum Framework is not mandatory for private preschool.
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	The minimum requirements to qualify as an ECEC classroom/playroom teacher to work in public-partnered preschool classrooms are holding at least a high school diploma (ISCED level 3), being proficient in the children's mother tongue, and in a foreign language (<i>posséder a minima un baccalauréat [diplôme de fin du secondaire qualifiant], maîtriser la langue maternelle des enfants ainsi qu'une langue étrangère</i>).
6.2. Yearly participation in professional development for staff ³	Participation is not mandated nationally and varies by provider and region; the Moroccan Foundation for the Promotion of Preschool Education organises regular annual training for its educators.

1. Enrolment rates include the number of children enrolled in ISCED 0 and other registered programmes, for purposes of international comparison.

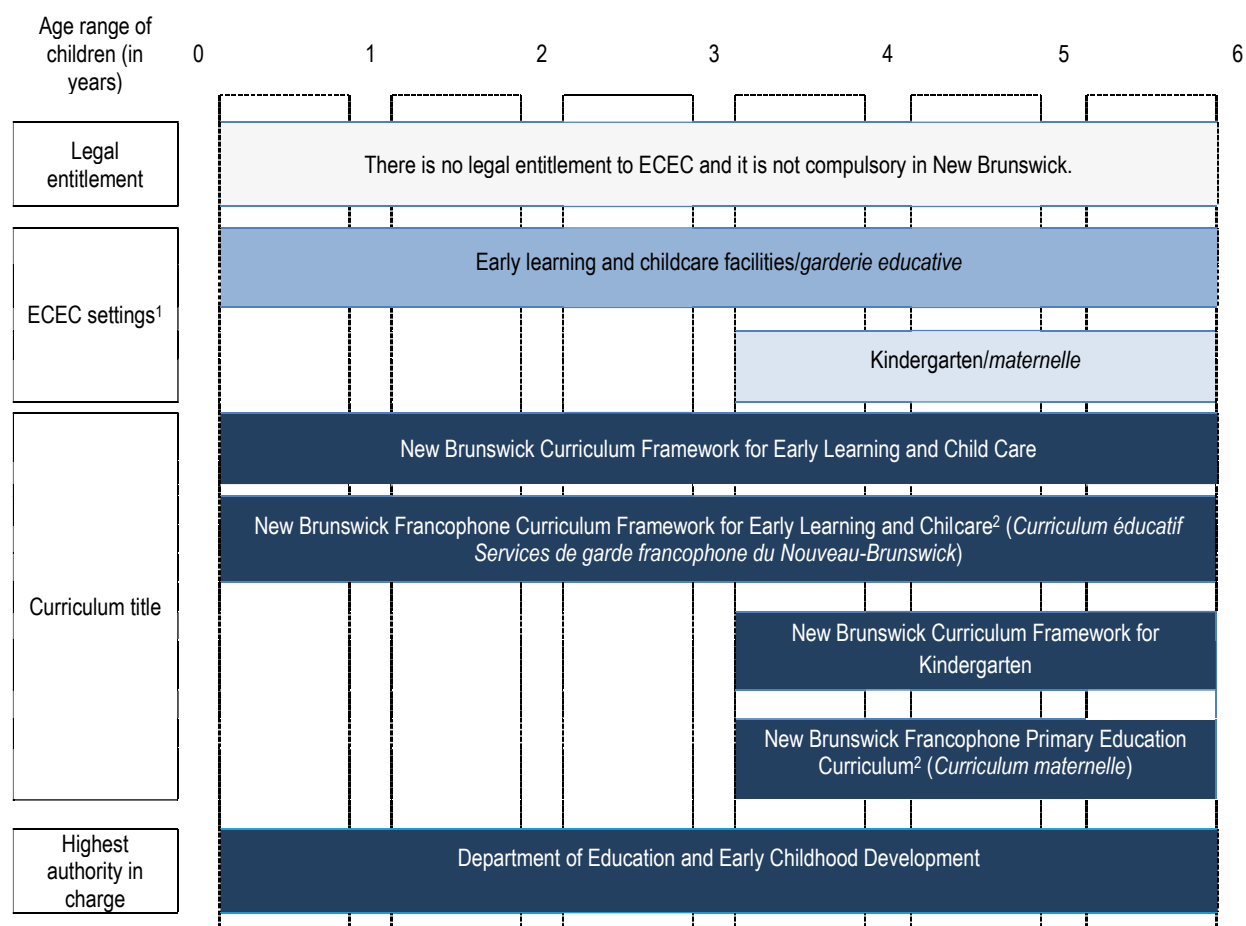
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

New Brunswick (Canada)

Figure A A.11. Organisation of the early childhood education and care system in New Brunswick (Canada)



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

2. Translations are not official and the Francophone curricula are only available in French.

Note: ECEC: early childhood education and care.

Table A A.11. Overview of early childhood education and care system-level indicators in New Brunswick (Canada)

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	–	% of children enrolled in ECEC services including ISCED and other registered programmes	–	–
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2025	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	Varies from 30 819 to 41 920 based on qualification levels.	
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	–	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	–
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC	–	% of GDP	–	–
3.2. Expenditure on ECEC per child	–	In equivalent USD converted using PPPs for GDP	–	–
3.3. Share of private expenditure on ECEC	–	% of expenditure by households and other private entities after transfers from public sources	–	–
3.4. Local government share of expenditure after inter-governmental transfers	–	% of local governments' share of expenditure after inter-governmental transfers (final funds)	–	–
3.5. Fee regulations and targeted support	Designated ECEC settings that receive operational grants are required to follow a Market Fee Threshold and Standard Parent Fee Grid, which cap parent contributions and limit fee increases. Disadvantaged families are also supported through income-tested subsidies (Parent Subsidy Program and Childcare Assistance Program), and targeted inclusion funding for children with disabilities.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Department of Education and Early Childhood Development			
4.2. Responsibility for monitoring settings	• Early learning and childcare facilities/<i>garderies éducatives</i> under the New Brunswick Curriculum Framework for Early Learning and Child Care or the New Brunswick Francophone Curriculum Framework for Early Learning and Chilcare (<i>Curriculum éducatif Services de garde francophone du Nouveau-Brunswick</i>) are monitored by regional or sub-regional governments. • Francophone kindergarten programmes (<i>maternelle</i>) are monitored by the central government. • Anglophone kindergarten programmes are monitored by district education authorities.			
5. Quality standards				
5.1. Group size and child-staff ratios	Licensed settings may enroll up to 60 children, with ratios and group sizes set by age: • Infants (under 24 months): 3:1, max. 6. • Two-year-olds: 5:1, group size: 10. • Three-year-olds: 8:1, group size: 16. • Four-year-olds: 10:1, group size: 20. • School-age (5-12 years): 15:1, group size: 30. • Mixed age groups: ratios are set for the group based on the ages of the children.			

Indicator	Description
5.2. Coverage of curriculum frameworks	- The New Brunswick Curriculum Framework for Early Learning and Child Care and the New Brunswick Francophone Curriculum Framework for Early Learning and Childcare (<i>Curriculum éducatif Services de garde francophone du Nouveau-Brunswick</i>) are required for use in designated early learning and childcare facilities/<i>garderies éducatives</i>. With the exception of school-age children, the framework is common to both anglophone and francophone sectors. In the francophone sector, a specific curriculum for school-age children exists (<i>the Cadre d'orientation du Curriculum des garderies éducatives francophones du Nouveau-Brunswick pour les enfants d'âge scolaire</i>). In the anglophone sector, a school-age curriculum is currently under development. - The New Brunswick Curriculum Framework for Kindergarten/<i>Curriculum maternelle</i> is part of a broader K-8 continuum of learning. Within this continuum, the Primary curriculum applies to Grades K-2, while the Kindergarten curriculum/<i>Curriculum maternelle</i> is specific to the kindergarten year and is compulsory for all kindergartens/<i>maternelles</i>.
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	Initial qualification requirements for staff differ by type of provision and age group served: - In centre-based ECEC, at least half of direct-care staff, including the director or designate, are required to hold a one-year certificate, diploma or equivalent with ECEC-specific content, corresponding to ISCED level 4. Staff without this qualification are required to complete the provincial Introduction to Early Childhood Education course, which includes 30 hours of training in the New Brunswick Curriculum Framework. - In home-based ECEC settings, there are no formal requirements for minimum initial educational attainment, although ECEC-specific initial education attainment is encouraged. However, providers without ECEC-specific initial education are required to complete the 30-hour Curriculum Framework training and a 60-hour orientation when working with children age 0-5. - For staff exclusively working with school-age children, there are no formal requirements for ECEC-specific initial education. - Out-of-province teachers with recognised ECEC credentials are also required to complete the 30-hour Curriculum Framework training.
6.2. Yearly participation in professional development for staff ³	- For early learning and childcare facilities/<i>garderies éducatives</i>, participation is neither regulated nor required. - For kindergartens/<i>maternelles</i>, participation is not mandatory, but is a common practice. - Staff in designated ECEC settings are required to complete at least ten hours of professional training annually.

1. Enrolment rates include the number of children enrolled in ISCED 01 and other registered programmes, for purposes of international comparison.

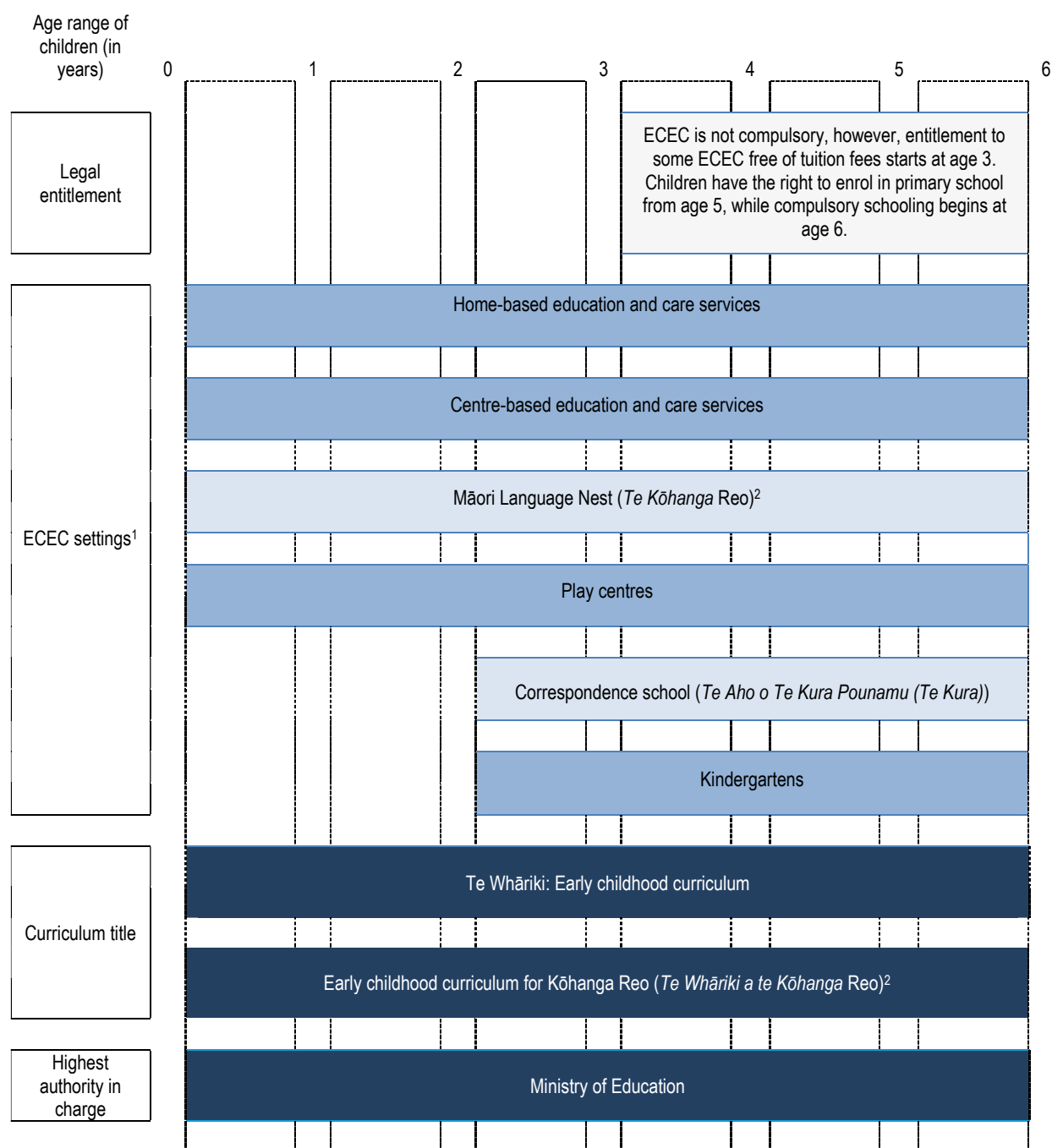
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

New Zealand

Figure A A.12. Organisation of the early childhood education and care system in New Zealand



- Settings with lighter colours are not included in the TALIS Starting Strong 2024 data. No data are available from kindergartens and play centres in the sample of settings for children under age 3; data are available in the pre-primary (ISCED level 02) sample for these types of settings.
- Kōhanga Reo* (language nests) are licensed providers of Māori language immersion early learning services with a wider focus on *whānau* (family) development.

Note: ECEC: early childhood education and care.

Table A A.12. Overview of early childhood education and care system-level indicators in New Zealand

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 37 Age 2: 72	Age 3: 84 Age 4: 84 Age 5: 96
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	–	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	–
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	–	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	–
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC ³	2022	% of GDP	0.3	0.3
3.2. Expenditure on ECEC per child ³	2022	In equivalent USD converted using PPPs for GDP	9 754	9 127
3.3. Share of private expenditure on ECEC	–	% of expenditure by households and other private entities after transfers from public sources	–	–
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	0	0
3.5. Fee regulations and targeted support	Children age 3-5 are entitled to 20 hours of ECEC per week without fees for families in centre-based settings.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Ministry of Education			
4.2. Responsibility for monitoring settings	Ministry of Education			
5. Quality standards				
5.1. Group size and child-staff ratios	Centre-based and hospital-based services: - Children under age 2: - All-day and sessional provision: 5:1. - Children age 2 and over: - All-day provision: for settings with less than 7 children it is 6:1, for settings with 7 or more children it is 10:1. - Sessional provision: for settings with less than 9 children it is 8:1, for settings with 9 or more children it is 15:1. - Mixed age groups: For up to 3 children of mixed ages it is 3:1, for more than 3 children of mixed ages staffing is calculated as the sum of minimum requirements for each age group. Home-based services: - Children under age 2: 2:1. - Children age 2 and over: 4:1. - Mixed age groups: 4:1.			

Indicator	Description
5.2. Coverage of curriculum frameworks	The curriculum corresponding to each type of ECEC setting is compulsory across all settings.
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	- There is no minimum qualification for staff in centre-based or hospital-based services; however, at least 50% of required staff must hold a recognised qualification, typically a degree-level qualification in early childhood education, corresponding to ISCED level 6. Services are incentivised through the funding system to employ a higher proportion of certificated teachers, with higher funding rates provided per child hour when more qualified staff are employed. - In home-based services, educators are required to hold at least a Level 4 home-based qualification or to be working towards it within six months of starting employment, equivalent to ISCED level 4.
6.2. Yearly participation in professional development for staff ⁴	Yearly participation in professional development for staff is common practice but not regulated in kindergartens and home- and centre-based education and care settings. It is neither regulated nor required for play centres.

1. Enrolment rates include the number of children enrolled in ISCED 0 and other registered programmes, for purposes of international comparison.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

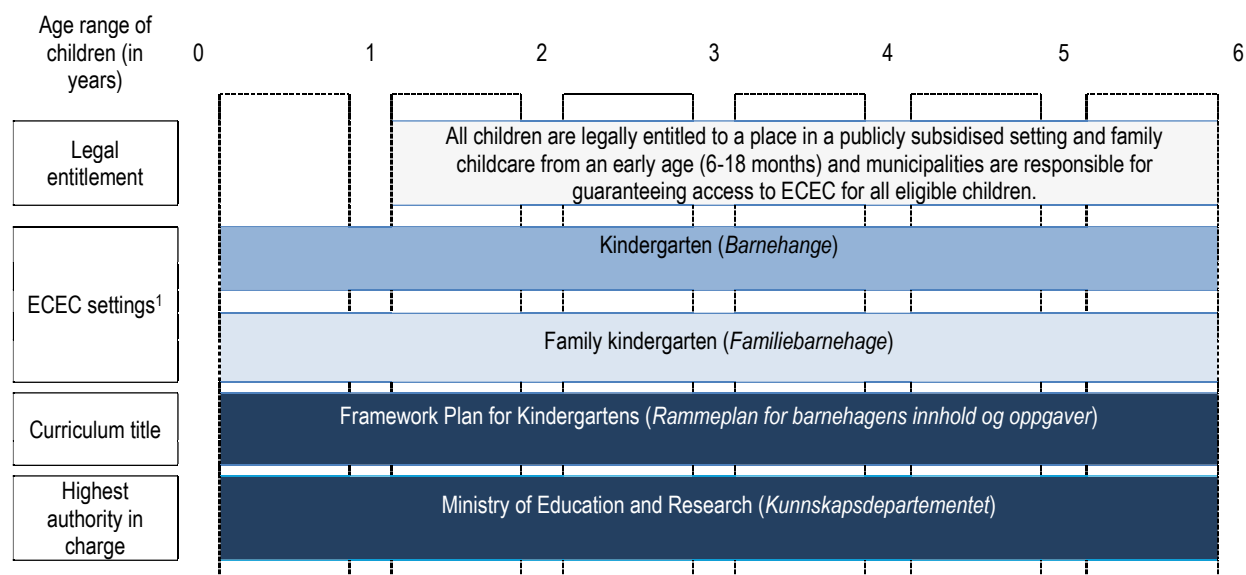
3. Expenditure includes government sources excluding private and domestic spending.

4. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Norway

Figure A A.13. Organisation of the early childhood education and care system in Norway



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.13. Overview of early childhood education and care system-level indicators in Norway

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 45 Age 2: 95	Age 3: 97 Age 4: 97 Age 5: 97
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	58 126
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	5 493
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.9	0.9
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	38 835	21 575

Indicator	Year	Description	Under age 3	Age 3-5
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	13	13
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	100	100
3.5. Fee regulations and targeted support	Universal entitlement to some ECEC free of tuition fees			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Ministry of Education and Research (<i>Kunnskapsdepartementet</i>)			
4.2. Responsibility for monitoring settings	Regional and sub-regional governments			
5. Quality standards				
5.1. Group size and child-staff ratios	No regulation on group size. Child-staff ratio: • for children under age 3: 3:1. • for children age 3 and above: 6:1. In addition, the <i>pedagogue norm</i> sets requirements for teacher staffing. Kindergartens (<i>barnehage</i>) are required to employ at least one qualified teacher for every 7 children under age 3 and one qualified teacher for every 14 children age 3 and above.			
5.2. Coverage of curriculum frameworks	Compulsory for all settings and groups.			
6. Workforce development				
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	ECEC classroom/playroom teachers are required to hold a preschool teacher qualification or another three-year pedagogical degree with additional training in early childhood education, corresponding to ISCED 6.			
6.2. Yearly participation in professional development for staff ³	Not mandatory, but participation each year is common practice.			

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes.

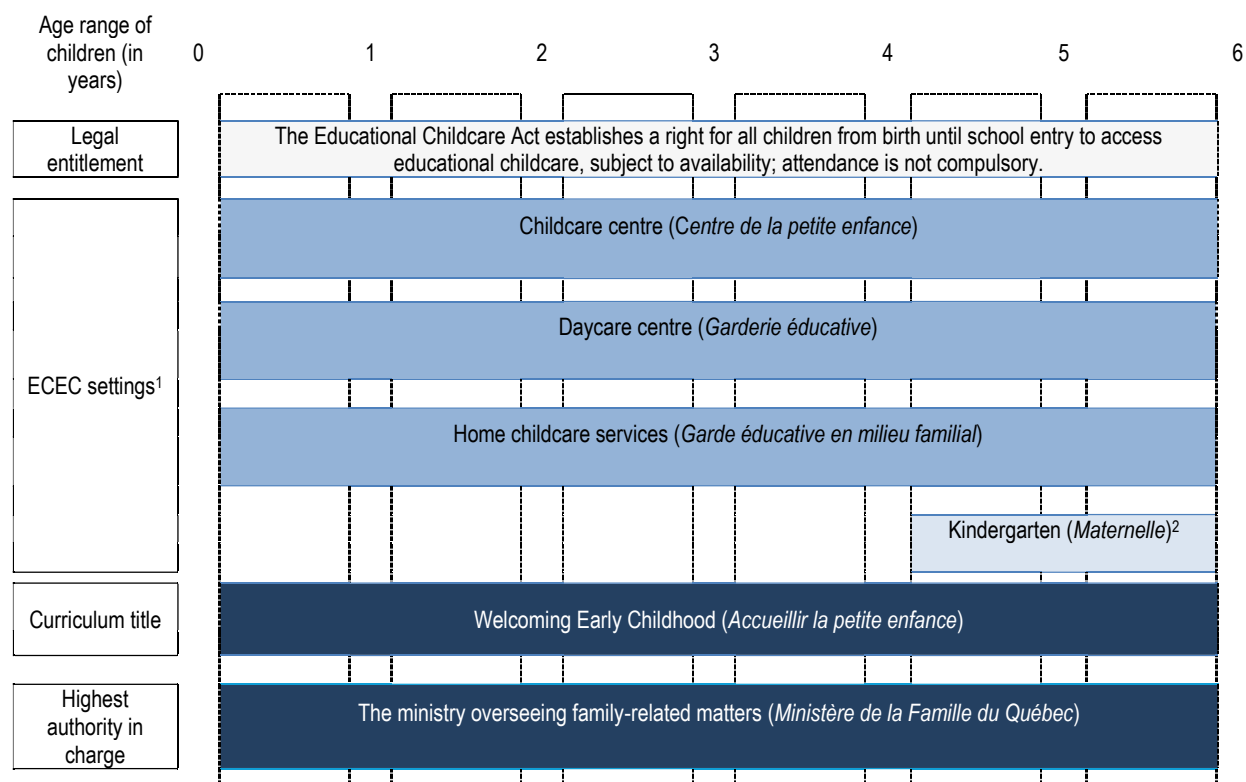
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Quebec (Canada)

Figure A A.14. Organisation of the early childhood education and care system in Quebec (Canada)



1. Settings with lighter colours are not included in the TALIS Starting Strong data 2024.

2. Kindergarten (*maternelle*) comprises children who have reached the age of 4 within the 12 months preceding 30 September of the current school year. This group is not included in the present overview.

Note: ECEC: early childhood education and care.

Table A A.14. Overview of early childhood education and care system-level indicators in Quebec (Canada)

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2024	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 58 Age 2: 77	Age 3: 78 Age 4: – Age 5: –
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD ³ converted using PPPs for private consumption.	Varies between USD 34 512 and USD 40 262 based on qualification levels.	
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	–	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD ³ converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	–
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC ⁴	2024	% of GDP	0.9	
3.2. Expenditure on ECEC per child	2024	In equivalent USD ³ converted using PPPs for GDP	USD 11 939	–
3.3. Share of private expenditure on ECEC	–	% of expenditure by households and other private entities after transfers from public sources	–	–
3.4. Local government share of expenditure after inter-governmental transfers	–	% of local governments' share of expenditure after inter-governmental transfers (final funds)	–	–
3.5. Fee regulations and targeted support		- Subsidised ECEC settings, including both centre-based and home-based settings, charge a regulated daily fee, with reduced rates available for lower income families through additional financial assistance. - Non-subsidised settings, including both centre-based and home-based settings, set their own fees, but parents may receive refundable tax credits based on income.		
4. Governance				
4.1. Responsibility for setting a regulatory framework	The government of Quebec is responsible for establishing the legal and regulatory framework related to the ECEC settings, according to the Educational Childcare Act (Section 106, Educational Childcare Act, Chapter S-4.1.1).			
4.2. Responsibility for monitoring settings	- The ministry overseeing family-related matters (<i>Ministère de la Famille du Québec</i>) is directly responsible for monitoring and ensuring compliance with the legal and regulatory framework. - For home-based educational childcare services (<i>garde éducative en milieu familial</i>), the co-ordinating offices for home-based educational childcare, which are accredited by the ministry overseeing family-related matters, are responsible for ensuring compliance with the standards and conditions required for recognition. - The government of Quebec also works closely with certain Indigenous partner organisations, to whom it has delegated specific responsibilities for monitoring and enforcing the legal and regulatory framework for certain indigenous ECEC services.			

Indicator	Description
5. Quality standards	
5.1. Group size and child-staff ratios	- For centre-based settings (<i>centre de la petite enfance/garderie éducative</i>): 100 children maximum per setting, based on the capacity of the space and distributed according to defined age groups. In addition, centre-based settings are required to respect the following child-staff ratios: 5:1 for children under 18 months. 8:1 for children 18 months to under 4 years. 10:1 for children aged 4-5 years. 20:1 for children aged 5 years and older. - For home-based settings (<i>garde éducatif en milieu familial</i>): 6 children per setting if a provider is working alone; 9 children per setting if the provider is assisted by another adult.
5.2. Coverage of curriculum frameworks	Each childcare service is required to implement its educational programme, which reflects its mission, values and vision. This programme outlines the guidelines for educational intervention and includes information to guide the educational staff. It is recommended that educational programmes be inspired by the reference framework Welcoming Early Childhood (<i>Accueillir la petite enfance</i>).
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	- For centre-based settings (<i>centre de la petite enfance/garderie éducative</i>): A minimum of an ISCED level 5 diploma specialised in early childhood education or equivalent is required. - For home-based settings (<i>garde éducatif en milieu familial</i>): If the provider does not hold an ISCED level 5 diploma, they are required to complete at least 45 hours of training in health, safety, nutrition, child development and the educational programme.
6.2. Yearly participation in professional development for staff ⁵	- For centre-based settings (<i>centre de la petite enfance/garderie éducative</i>): Participation in professional development is not regulated or required. - For home-based settings (<i>garde éducatif en milieu familial</i>): Participation in professional development is required at least for six hours annually to maintain setting status.

1. Enrolment rates include the number of children enrolled in ISCED 01 programmes.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Information was provided by Quebec in Canadian dollars (CAD) and was converted to US dollars (USD) using PPPs for private consumption reference year 2023 as provided by *Education at a Glance 2025*, see Annex A sources.

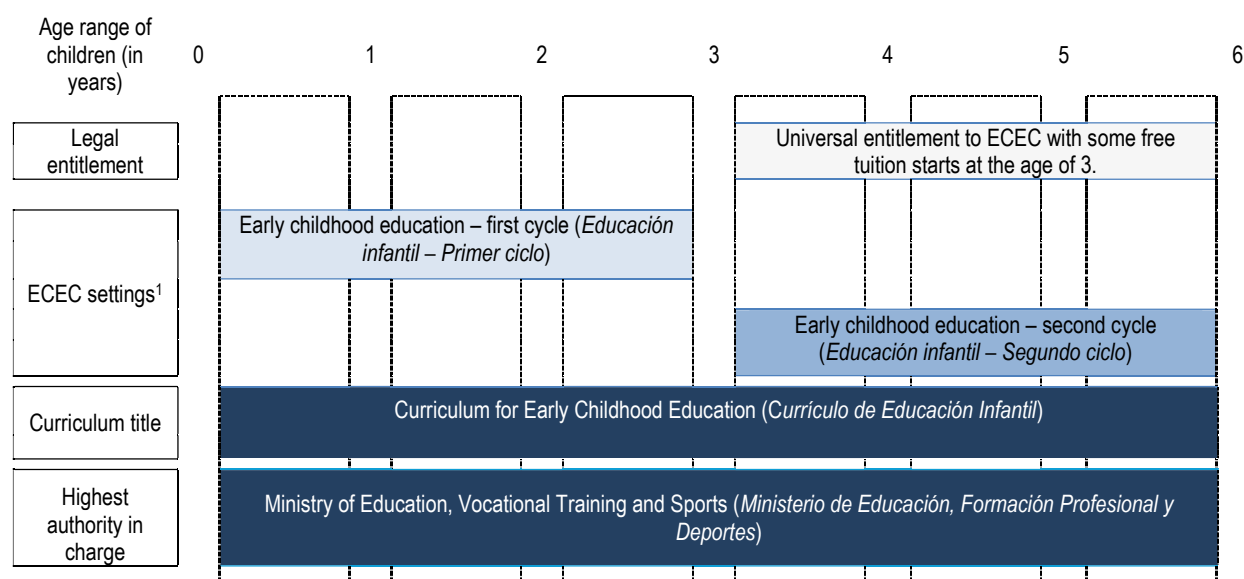
4. Expenditure on ECEC was provided by Quebec as CAD 3.8 billion, plus CAD 0.2 billion in subsidies for infrastructure investments, for the period April 2023 to March 2024. To calculate expenditure as a share of GDP, the provincial GDP was averaged across 2023 (CAD 437 230 million) and 2024 (CAD 442 865 million), resulting in CAD 440 048 million. The expenditure figure of CAD 4.0 billion was then divided by the average GDP. Source for GDP: [Statistics Canada, Gross domestic product \(GDP\) at basic prices, by industry, province and territory](#).

5. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Spain

Figure A A.15. Organisation of the early childhood education and care system in Spain



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.15. Overview of early childhood education and care system-level indicators in Spain

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 33 Age 2: 71	Age 3: 97 Age 4: 98 Age 5: 98
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	59 291
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	0
2.3. Total statutory working time for teachers ² per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	1 406
2.4. Statuary net teaching time	2023	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	854
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.2	0.5
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	11 886	10 263

Indicator	Year	Description	Under age 3	Age 3-5
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	25	12
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	11	10
3.5. Fee regulations and targeted support	Universal entitlement to some ECEC free of tuition fees.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Ministry of Education (<i>Ministerio de Educacion</i>)			
4.2. Responsibility for monitoring settings	The educational authorities of the autonomous communities are responsible for monitoring ECEC settings in public and government-funded private schools.			
5. Quality standards				
5.1. Group size and child-staff ratios	- For early childhood education – first cycle (<i>Educación infantil – Primer ciclo</i>), the child-staff ratio varies depending on the autonomous community and age group: - for children under 1 year old: the ratios vary from 6:1 to 8:1. - for 1-year-old children: the ratios vary from 10:1 to 14:1. - for 2-year-old children: the ratios vary from 16:1 to 20:1. - Early childhood education – second cycle (<i>Educación infantil – Segundo ciclo</i>), Article 7 of Royal Decree 132/2010 establishes a maximum of 25 pupils per class group and teacher.			
5.2. Coverage of curriculum frameworks	The organisation and minimum curriculum requirements for ISCED 01 and ISCED 02 are regulated at the national level by Royal Decree 95/2022. Building on these national requirements, the educational authorities of the autonomous communities, through their respective regional ministries and departments of education, develop the ECEC curriculum for both levels.			
6. Workforce development				
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	To qualify as a classroom/playroom teacher in an early childhood care and education setting, a short-cycle tertiary degree with content-specific knowledge of ECEC is required, corresponding to ISCED level 5. To qualify as a classroom/playroom teacher in a pre-primary setting, a bachelor's degree with content-specific knowledge of ECEC is required, corresponding to ISCED level 6.			
6.2. Yearly participation in professional development for staff ³	–			

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes.

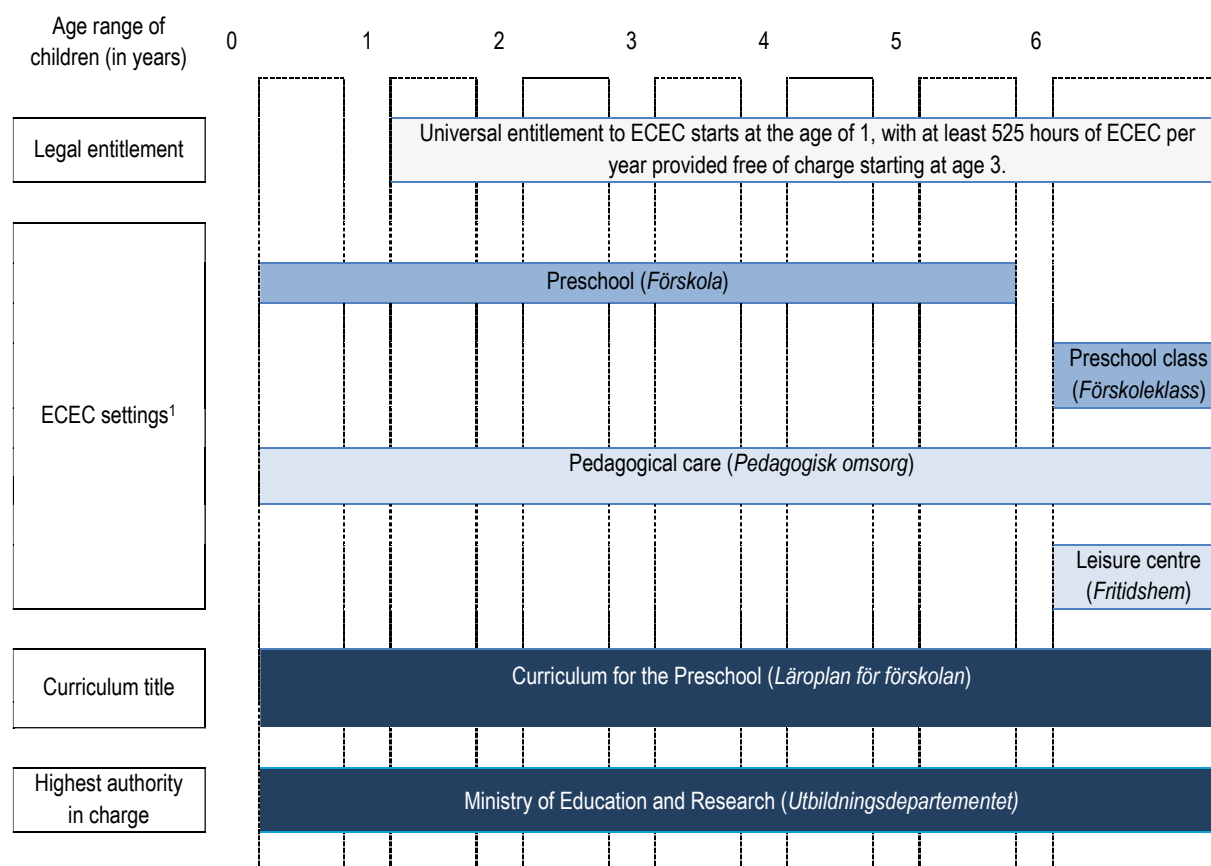
2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Sweden

Figure A A.16. Organisation of the early childhood education and care system in Sweden



1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.
Note: ECEC: early childhood education and care.

Table A A.16. Overview of early childhood education and care system-level indicators in Sweden

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2024	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 52 Age 2: 92	Age 3: 95 Age 4: 96 Age 5: 96
2. Working conditions				
2.1. Statutory salary of teachers ^{2,3} after ten years of experience	2023	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	51 136
2.2. Gap in statutory salary between teachers ^{2,3} in primary and pre-primary after ten years of experience	2023	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	3 418
2.3. Total statutory working time for teachers ² per school year	–	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	–

Indicator	Year	Description	Under age 3	Age 3-5
2.4. Statuary net teaching time	–	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	–
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	0.5	1.1
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	23 242	16 494
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	6	6
3.4. Local government share of expenditure after inter-governmental transfers	2021	% of local governments' share of expenditure after inter-governmental transfers (final funds)	100	–
3.5. Fee regulations and targeted support	Universal entitlement to some ECEC free of tuition fees.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	Ministry of Education and Research (<i>Utbildningsdepartementet</i>)			
4.2. Responsibility for monitoring settings	Municipalities are responsible for monitoring private ECEC settings in their municipality and the Swedish Schools Inspectorate (<i>Skolinspektionen</i>) is responsible for monitoring the settings on a municipality level.			
5. Quality standards				
5.1. Group size and child-staff ratios	There is no regulation for the group size; however, the Swedish National Agency for Education recommends 6-12 children per group aged 1-3 years. For children aged 4-5 years, the guideline is 9-15 children per group. There is no regulation or guideline for child-staff ratios.			
5.2. Coverage of curriculum frameworks	The Curriculum for the Preschool (<i>Läroplan för förskolan</i>) applies to preschools (<i>förskola</i>) and preschool classes (<i>förskoleklass</i>). Pedagogical care (<i>pedagogisk omsorg</i>), regulated under “other pedagogical activities” in the Education Act (<i>Skollagen</i>), has no separate curriculum, but the preschool curriculum serves as guidance.			
6. Workforce development				
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	To qualify as a childminder for pedagogical care (<i>pedagogisk omsorg</i>), there are no formal educational qualification requirements. To become a classroom/playroom teacher in a preschool setting (<i>förskola</i> and <i>förskoleklass</i>), a bachelor's degree with content-specific knowledge related to ECEC is required, corresponding to ISCED level 6.			
6.2. Yearly participation in professional development for staff ⁴	There is no regulation mandating annual professional development. The National Agency for Education (<i>Skolverket</i>) provides subsidies to municipalities to support staff training, but participation is voluntary.			

1. Enrolment rates include the number of children enrolled in ECEC services, including ISCED 0 and other registered programmes, for purposes of international comparison. Pre-primary education in Sweden also includes children aged 6 and the other indicators in this profile reflect the situation for the full age-range of the pre-primary education system.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Data exclude social security contributions and pension scheme contributions paid by employees.

4. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Türkiye

Figure A A.17. Organisation of the early childhood education and care system in Türkiye

Age range of children (in years)	0	1	2	3	4	5
Legal entitlement					Universal and free access to early childhood education starts at age 3 and compulsory primary education starts at age 6.	
ECEC settings ¹					Public and private kindergartens (<i>Resmi ve özel anaokulları</i>)	
					Practice classroom (<i>Uygulama sınıfları</i>)	
					Special education preschool (<i>Özel eğitim anaokulu</i>)	
						Public and private preschool classrooms (<i>Resmi ve özel ana sınıfları</i>)
					Early childhood care and education (<i>Erken çocukluk dönem eğitimi</i>)	
					Special early childhood education (<i>Erken çocukluk özel eğitim</i>)	
					Childcare centres (<i>Özel kreş ve gündüz bakımevleri</i>)	
Curriculum title					Preschool education programme for 36-72 months (<i>Okul Öncesi Eğitim Programı</i>)	
					Special preschool education programme for 37-78 months (<i>Okul Öncesi Özel Eğitim Programı</i>)	
					Education programme for 0-36 months (<i>0-3 Yaş Çocuklar için Okul Öncesi Eğitim Programı</i>)	
					Special early childhood education programme for 0-36 months (<i>Erken Çocukluk Özel Eğitim ve Öğretim Programı</i>)	
Highest authority in charge					Ministry of Family and Social Services (<i>Aile ve Sosyal Hizmetler Bakanlığı</i>)	
					Ministry of National Education (<i>Milli Eğitim Bakanlığı</i>)	

1. Settings with lighter colours are not included in the TALIS Starting Strong 2024 data.

Note: ECEC: early childhood education and care.

Table A A.17. Overview of early childhood education and care system-level indicators in Türkiye

Indicator	Year	Description	Under age 3	Age 3-5
1. Enrolment in ECEC				
1.1. Enrolment rates ¹	2023	% of children enrolled in ECEC services including ISCED and other registered programmes	Under 2: 0 Age 2: 2	Age 3: 15 Age 4: 43 Age 5: 98
2. Working conditions				
2.1. Statutory salary of teachers ² after ten years of experience	2024	Annual salary of full-time teachers in public ECEC settings, in equivalent USD converted using PPPs for private consumption.	–	64 442
2.2. Gap in statutory salary between teachers ² in primary and pre-primary after ten years of experience	2024	Difference in annual salaries of full-time teachers in public ECEC settings and primary schools in equivalent USD converted using PPPs for private consumption. A positive value indicates that primary school teachers earn more than ECEC teachers after ten years of experience.	–	0
2.3. Total statutory working time for teachers ² per school year	2023	Statutory working time refers to the annual number of hours that a full-time teacher is expected to work as set by policy.	–	1 584
2.4. Statuary net teaching time	2023	Teaching time is calculated as the net contact time in hours per year for instruction excluding both times allocated for lunch breaks or short morning or afternoon breaks and days that the school is closed for holidays.	–	898
3. Expenditure and funding				
3.1. Expenditure on ECEC	2022	% of GDP	–	0.2
3.2. Expenditure on ECEC per child	2022	In equivalent USD converted using PPPs for GDP	–	4 163
3.3. Share of private expenditure on ECEC	2022	% of expenditure by households and other private entities after transfers from public sources	–	18
3.4. Local government share of expenditure after inter-governmental transfers	2022	% of local governments' share of expenditure after inter-governmental transfers (final funds)	–	2
3.5. Fee regulations and targeted support	ECEC is free for children over age three. Families may pay a contribution fee for basic needs and programme implementation, except low-income families who are exempt. Targeted supports include conditional cash transfers to encourage enrolment, stationary assistance for disadvantaged children and free textbooks for all children.			
4. Governance				
4.1. Responsibility for setting a regulatory framework	The Ministry of National Education (<i>Milli Eğitim Bakanlığı</i>) is responsible for setting a regulatory framework for ECEC settings. The Ministry of Family and Social Services (<i>Aile ve Sosyal Hizmetler Bakanlığı</i>) is responsible for the regulation and licensing of childcare centres (<i>özel kreş ve gündüz bakımevleri</i>).			
4.2. Responsibility for monitoring settings	–			
5. Quality standards				
5.1. Group size and child-staff ratios	- For pre-primary settings, group size is up to 20 children (can vary depending on indoor space) and the child-staff ratio is 18:1. - For pre-primary settings under the Ministry of Family and Social Sciences group size for 0-24 months is up to 10 and group size for 25-66 months is up to 20.			
5.2. Coverage of curriculum frameworks	Curriculum frameworks prepared for different ECEC programmes are compulsory.			

Indicator	Description
6. Workforce development	
6.1. Minimum initial educational attainment required for ECEC classroom/playroom teachers ²	To qualify as a classroom/playroom teacher in an early childhood care and education setting, an upper secondary level education is required, corresponding to ISCED level 3. To qualify as a classroom/playroom teacher in a pre-primary setting, a bachelor's degree with content-specific knowledge in ECEC required, corresponding to ISCED level 6.
6.2. Yearly participation in professional development for staff ³	For all ECEC settings, minimum yearly participation in professional development is a common practice but not required by the government.

1. Enrolment rates include the number of children enrolled in ISCED 01 and ISCED 02 programmes.

2. Teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred to as pedagogues, educators or childcare practitioners. They have varying levels of qualification across countries but are generally expected to hold qualifications commensurate with the professional nature of their work, often a tertiary degree.

3. Staff refers to individuals whose professional activity involves the care and transmission of knowledge, attitudes and skills to children enrolled in an ECEC setting. This definition does not depend on the qualification held by the ECEC staff or on the delivery mechanism. ECEC staff may include teachers, educators, assistants or staff working with individual children, among other categories.

Notes: ECEC: early childhood education and care; ISCED: International Standard Classification of Education; PPP: purchasing power parity; GDP: gross domestic product.

Sources

Enrolment rates

Data on enrolment rates (Indicator 1.1) are drawn from the 2024 UNESCO/OECD/Eurostat (UOE) data collection on education systems, conducted annually by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the OECD; and Eurostat for all OECD Member and Partner countries, and published in *Education at a Glance 2025* (OECD, 2025^[1]). Data for Quebec (Canada), the Flemish Community of Belgium, and Morocco were collected for this report through members of the Informal Group on TALIS Starting Strong from the respective countries and subnational entities.

Working conditions

Data on statutory salaries (Indicator 2.1) come from the 2024 Joint Eurydice-OECD data collection on salaries of teachers and school heads, as published in *Education at a Glance 2025* (OECD, 2025^[1]). For the purposes of that data collection, teachers are the individuals with the most responsibility for a group of children at the classroom or playroom level and may be referred as pedagogues, educators or childcare practitioners.

Statutory salaries are reported for teachers with the most prevalent qualification after ten years of experience in their career, in national currencies and converted into USD using purchasing power parities (PPPs) for private consumption from the OECD *National Accounts database*. The gap in statutory salaries between pre-primary and primary teachers after ten years of experience (Indicator 2.2) was calculated for this report based on the same source. Data for the Canadian provinces of New Brunswick and Quebec were collected for this report through members of the Informal Group on TALIS Starting Strong from New Brunswick and Quebec, reported in national currencies, and converted into USD using PPPs for private consumption, reference year 2023, as provided by *Education at a Glance 2025* (see Table X2.8) (OECD, 2025^[2]).

Data on teachers' total statutory working time (Indicator 2.3) and statutory net teaching time (Indicator 2.4) come from the biennial system-level data collection of the INES NESLI Network on teaching and working time of teachers as published in *Education at a Glance 2024* (OECD, 2024^[3]). Sources of the data provided by the national and subnational representatives for the INES NESLI Network data collection are presented in [Table X3.D4.1](#) (OECD, 2024^[3]).

Expenditure and funding

Data on expenditure on early childhood education and care (ECEC) as a share of gross domestic product (GDP) (Indicator 3.1), expenditure on ECEC per child (Indicator 3.2), the share of private expenditure (Indicator 3.3) and the local government share of public expenditure after inter-governmental transfers (Indicator 3.4) are drawn from the 2024 UOE data collection (OECD, 2025^[1]). For integrated International Standard Classification of Education (ISCED) 01 and 02 systems, expenditure is allocated between levels using national methods or, where unavailable, relative group sizes.

The indicator on expenditure on ECEC (Indicator 3.1) includes both public and private sources, covering current and capital expenditure on ECEC institutions. The indicator is calculated by dividing total expenditure on ECEC institutions by GDP in the same reference year, expressed as a percentage. Expenditure data are reported in national currencies and converted into USD using PPPs for GDP from the OECD *National Accounts database* for international comparability. For the Flemish Community of Belgium, expenditure on ECEC was provided by the members of the Informal Group on TALIS Starting Strong. Expenditure on ECEC for Quebec (Canada) was provided by the members of the Informal Group on TALIS Starting Strong for the period April 2023-March 2024. To calculate expenditure as a share of

GDP, the provincial GDP was sourced from national statistics and averaged across 2023 and 2024 (Statistics Canada, 2025^[4]). The expenditure figure was then divided by the average GDP for these two years.

The indicator on ECEC expenditure per child (Indicator 3.2) is calculated by dividing total expenditure on ECEC institutions by the number of children enrolled at the corresponding level of education (OECD, 2025^[1]). Expenditure figures are reported in national currencies and converted into USD using PPPs for GDP; enrolment data refer to the same reference year to ensure consistency. For the Flemish Community of Belgium, expenditure on ECEC per child was provided by the members of the Informal Group on TALIS Starting Strong. For Quebec (Canada), expenditure on ECEC per child was provided by members of the Informal Group on TALIS Starting Strong and converted into USD using PPPs for private consumption reference year 2023 as provided by *Education at a Glance 2025* (see Table X2.8) (OECD, 2025^[2]).

The indicator on the share of private expenditure (Indicator 3.3) refers to the proportion of total spending on ECEC institutions derived from private sources, mainly household payments for tuition, ancillary services and other private contributions (OECD, 2025^[1]). It is calculated by dividing total private expenditure by the sum of public and private expenditure on ECEC institutions at each ISCED level, expressed as a percentage. The indicator on the local government share (Indicator 3.4) measures the proportion of public expenditure financed directly by local authorities after accounting for transfers from higher levels of government. For the Flemish Community of Belgium, the share of private expenditure and the local government share was provided by the members of the Informal Group on TALIS Starting Strong.

Data for the indicator on the fee regulations and targeted support (Indicator 3.5) were collected for this report through members of the Informal Group on TALIS Starting Strong from the respective countries and subnational entities.

Governance, quality standards and workforce development

Data for the indicators on governance (Indicators 4.1 and 4.2), quality standards (Indicators 5.1 and 5.2) and workforce development (Indicator 6.2) are primarily drawn from *Starting Strong VI: Supporting Meaningful Interactions in Early Childhood Education and Care* and the accompanying *Starting Strong: Mapping Quality in ECEC* database, developed by the OECD between 2018 and 2021 (OECD, 2021^[5]; 2021^[6]). For the purposes of this report, the data were recirculated to countries and subnational entities for verification, completion of missing information and updates to reflect recent policy developments. Countries that did not participate in the original data collection, including Colombia, Morocco, Spain and Sweden, provided system-level information specifically for the purposes of this report.

Data for minimum initial educational attainment required for ECEC classroom/playroom teachers (Indicator 6.1) are drawn from the OECD Education at a Glance ECEC Dashboard, which compiles information from the ISCED questionnaire (ISCMAP) administered by the UOE data collection (OECD, 2025^[1]). For the purposes of this report, the data were circulated again to countries and subnational entities for verification and to provide qualification requirements for non-ISCED programmes that are beyond the scope of the ISCMAP questionnaire. Countries and subnational entities that did not participate in the original data collection, including Morocco and the Canadian provinces of New Brunswick and Quebec, provided information on the qualification requirements specifically for the purposes of this report.

References

- OECD (2025), *Education at a Glance 2025 Sources, Methodologies and Technical Notes*, OECD Publishing, Paris, <https://doi.org/10.1787/fcfaf2d1-en>. [1]
- OECD (2025), *Education at a Glance 2025: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/1c0d9c79-en>. [2]
- OECD (2024), *Education at a Glance 2024: Sources, Methodologies and Technical Notes*, OECD Publishing, Paris, <https://doi.org/10.1787/e7d20315-en>. [3]
- OECD (2021), *Starting Strong Mapping Quality in ECEC: Methodology*, OECD, Paris, <https://quality-ecec.oecd.org/assets/files/methodology.pdf>. [5]
- OECD (2021), *Starting Strong VI: Supporting Meaningful Interactions in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, <https://doi.org/10.1787/f47a06ae-en>. [6]
- Statistics Canada (2025), “Table: 36-10-0402-01: Gross domestic product (GDP) at basic prices, by industry, provinces and territories (x 1,000,000) [data set]”, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610040201>. [4]

Annex B. Technical notes on sampling, response rates and adjudication

Sampling procedures

The objective of the Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024 was to obtain a representative sample in each participating country or subnational entity of staff and leaders providing early childhood education and care (ECEC) for each level of ECEC (i.e. ISCED level 02 or settings for children under age 3) in which the country or subnational entity participated. The international sampling plan used a stratified two-stage probability sampling design. ECEC settings served as the first-stage units (primary sampling units), randomly selected from within strata. For countries and subnational entities with age-integrated ECEC systems that participated in the data collection for both pre-primary education (ISCED level 02) and settings for children under age 3, settings serving both age groups were randomly split between the two samples so that each setting could be selected for participation in only one level of ECEC. Staff were then randomly selected from the list of eligible staff within those settings, serving as secondary sampling units. A more detailed description of the survey design and its implementation can be found in the *TALIS 2024 Technical Report* (OECD, forthcoming^[1]).

Participating countries and subnational entities had the option to restrict the coverage of their national implementation of TALIS Starting Strong for reasons of practicality, safety or economy. However, they were encouraged to minimise such exclusions and ensure that their national survey population covered at least 95% of ECEC staff. National project managers were required to document the reasons for each exclusion.

Definition of early childhood education and care settings, leaders and staff

The international target population of TALIS Starting Strong restricts the survey to those staff and leaders who work in officially registered settings providing ECEC. Settings exclusively for children with special educational needs are deemed out of scope. For the ISCED level 02 target population, home-based settings (i.e. within the homes of the respective staff) are not considered to be part of the target population. Officially registered home-based settings are considered in-scope for the target population of settings for children under age 3.

Staff in pre-primary settings (ISCED level 02) include all persons working regularly in a pedagogical way, providing learning opportunities or care, with children of ISCED level 02. Staff for children under age 3 include all persons working regularly in a pedagogical way, providing learning opportunities or care, with children in this age group. Staff who provide learning opportunities for both target populations in their settings are included in the TALIS Starting Strong population for the age group for which their setting is sampled. There is no minimum cut-off for how much time staff need to be engaged at either level of ECEC.

The following types of staff are considered out of scope for TALIS Starting Strong 2024: temporary substitute educators (to replace staff on sick leave), staff on long-term leave (e.g. disability, sabbatical) who are not expected to be back working at the time of data collection, persons working as nannies or in informal arrangements, staff providing services exclusively within a child's home (e.g. home visiting),

volunteer persons who occasionally come in for a special activity, and auxiliary staff (e.g. cleaners, cooking staff, etc.) who do not interact regularly in a pedagogical manner with the children.

The leader at each setting (i.e. the person with the most responsibility for administrative, managerial and/or pedagogical leadership at the ECEC setting) was automatically selected for participation. At the time of sampling, if the leader was designated as also having staff duties (i.e. meeting the sampling definition of ECEC staff), s/he was assigned to participate using the main version of the combined questionnaire (CQM) in countries and subnational entities that used this version of the questionnaire (OECD, forthcoming^[2]). At the time of sampling, if the leader was the only staff member listed in an ECEC setting, s/he was assigned to participate using the short version of the combined questionnaire (CQS) in countries and subnational entities that used this version of the questionnaire.

Sample size requirements

For each level of ECEC, the minimum sample size was set at 180 ECEC settings and 1 200 staff members in total. In ECEC settings with eight or more eligible staff members, at least eight staff members were to be selected; in settings with fewer eligible staff members, all of them were to be asked to participate.

Participating countries and subnational entities could choose to augment their samples by selecting more settings, or by selecting more staff within each selected setting, or by increasing both. In some cases, because the average number of staff in ECEC settings was low, the number of settings sampled was increased.

Adjudication process

Adjudication is the process of determining whether the data released were “fit-for-use” as intended. The issues examined concerned, among others, adapting the questionnaire to national context, translation and verification, quality of the sampling frame, handling of out-of-scope and refusal units (i.e. staff and/or setting), within-setting sampling, data collection, data cleaning, the reports of quality observers, participation rates and overall compliance with the technical standards.

During the adjudication session, each individual dataset (i.e. one per level of ECEC per country or subnational entity) was submitted to the same examination. Leader/setting participation was adjudicated independently of staff data.

Once each survey process had been assessed, a recommended adjudication rating was formulated. While the rating was mostly dictated by the participation rate thresholds set in the TALIS 2024 Technical Standards (see Table A B.1 and Table A B.2), the adjudication committee at times improved the rating of a dataset if, after expert consideration, unique and favourable conditions were met (e.g. closeness to the threshold value and/or the non-response bias analysis report showing evidence for negligible bias risks).

To note, the adjudication rating is made at the ECEC system level. However, participation rates are just one potential source of non-response bias and potential non-response bias is specific to each statistical estimate from the survey data. Therefore, some estimates of systems with an adjudication rating of “good” might still have a high non-response bias; correspondingly, some estimates of systems with an adjudication rating of “poor” might still be reliable. For example, if staff with a particular characteristic systematically do not respond to a specific question in a system with a “good” rating, but that question is answered by all staff in a system with a “poor” rating, estimates based on that question may be more affected by non-response bias in the “good” system compared to the “poor” system. For more detailed information, please refer to the *TALIS 2024 Technical Report* (OECD, forthcoming^[1]).

At its January 2025 meeting in Paris, the TALIS 2024 Technical Advisory Group (TAG) recommended that data from all participating countries and subnational entities be weighted and displayed in tables, regardless of the adjudication ratings. The TAG further recommended clearly indicating to readers when data were rated as “insufficient,” due to the greater risk of non-response bias in these samples. TALIS Starting Strong 2024 data from New Zealand were deemed an exception to this general principle, although the TAG supported presenting these data with the caveat that they are not representative of the population targeted by the survey.

Based on these recommendations, countries and subnational entities with “insufficient” ratings are flagged (*) in tables and figures with the note: *Estimates should be interpreted with caution due to a higher risk of non-response bias*. Data from New Zealand are visually separated in tables and figures and are flagged (**) in tables, figures and the text with the note: *Data only represent respondents included in the sample and not the population targeted by the survey*. No distinctions are made in the report for data rated as “good”, “fair” or “poor”; more detailed implications of these ratings are described in the *TALIS 2024 Technical Report* (OECD, forthcoming^[1]).

Table A B.1. Adjudication rules for setting or leader data

Setting/leader participation before replacement	Setting/leader participation after replacement	Risk of non-response bias	Rating
≥75%	≥75%		Good
≥50% but <75%	≥75%		Fair
≥50% but <75%	≥50% but <75%	Low	Fair
≥50% but <75%	≥50% but <75%	High	Poor
<50%			Insufficient

Source: TALIS 2024 Technical Standard 3.26.

Table A B.2. Adjudication rules for staff data

Setting/leader participation before replacement	Setting/leader participation after replacement	Staff participation after setting replacement	Risk of staff non-response bias	Rating
≥75%	≥75%	≥75%		Good
≥75%	≥50% but <75%			Fair
≥50% but <75%	≥75%	≥75%		Fair
≥50% but <75%	≥75%	≥50% but <75%	Low	Fair
≥50% but <75%	≥75%	≥50% but <75%	High	Poor
≥50% but <75%	≥50% but <75%			Poor
<50%	≥75%			Poor
<50%	<75%			Insufficient

Source: TALIS 2024 Technical Standard 3.27.

Participation rates and adjudication ratings

Tables A B.3, A B.4, A B.5 and A B.6 present the participation rates and the adjudication rating per participating country and subnational entity, level of ECEC, and population (i.e. settings/leaders and staff). Detailed results of unweighted and weighted participation can be found in Annex G of the *TALIS 2024 Technical Report* (OECD, forthcoming^[1]).

Table A B.3. Settings for children under age 3: Leader participation and recommended ratings

Participating country or subnational entity	Number of participating leaders	Estimated size of leader population	Leader participation before replacement (%)	Leader participation after replacement (%)	Recommended rating
Flemish Community (Belgium)	125	5 327	34.9	53.4	Insufficient
Germany ¹	165	46 847	49.5	74.2	Poor
Ireland	183	2 154	39.6	59.5	Insufficient
Israel	289	5 953	77.2	85.5	Good
New Brunswick (Canada)	84	489	31.3	35.9	Insufficient
New Zealand ²	34	m	21.1	24.8	Insufficient
Norway	76	4 812	28.0	40.9	Insufficient
Quebec (Canada)	85	10 317	23.4	59.8	Insufficient

¹ The rating was defined as “poor” although the participation rate before replacement did not completely reach 50%.

² Due to low participation rates, a non-response adjustment was not implemented and the estimated population size, therefore, remains unknown.

Note: A setting was deemed a participating setting if the leader returned their questionnaire with at least one question answered.

Table A B.4. Settings for children under age 3: Staff participation and recommended ratings

Participating country or subnational entity	Number of participating settings	Number of participating staff	Estimated size of staff population	Setting participation before replacement (%)	Setting participation after replacement (%)	Staff participation in participating settings (%)	Overall staff participation (%)	Recommended rating
Flemish Community (Belgium)	128	499	16 765	35.8	55.3	83.6	46.2	Insufficient
Germany	167	876	310 220	50.5	76.0	87.8	66.7	Fair
Ireland	207	899	11 865	44.0	66.3	75.2	49.8	Insufficient
Israel	297	1 505	25 597	78.7	87.9	85.4	75.1	Good
New Brunswick (Canada)	88	275	2 345	34.7	38.6	85.4	33.0	Insufficient
New Zealand ¹	33	164	m	17.8	23.9	73.0	17.4	Insufficient
Norway	68	367	41 262	26.2	36.8	73.4	27.0	Insufficient
Quebec (Canada)	82	311	41 882	23.3	49.7	75.0	37.3	Insufficient

¹ Due to low participation rates, a non-response adjustment was not implemented, and the estimated population size, therefore, remains unknown.

Note: A setting was deemed a participating setting if at least 33% of the selected staff returned their respective questionnaires with at least one question answered.

Table A B.5. Pre-primary education (ISCED level 02): Leader participation and recommended ratings

Participating country or subnational entity	Number of participating leaders	Estimated size of leader population	Leader participation before replacement (%)	Leader participation after replacement (%)	Recommended rating
Chile	160	8 748	78.6	88.3	Good
Colombia	157	75 191	55.2	68.3	Poor
Denmark	150	3 378	55.5	82.4	Fair
Finland	204	4 160	92.4	97.1	Good
Flemish Community (Belgium)	158	2 288	62.7	83.2	Fair
Germany	138	50 860	45.2	70.3	Insufficient
Ireland	149	3 950	36.0	59.9	Insufficient
Israel	285	12 399	86.1	92.2	Good
Japan	189	37 007	71.4	95.0	Fair
Morocco	429	21 931	93.3	98.3	Good
New Zealand ¹	38	m	19.7	22.9	Insufficient
Norway	84	4 929	31.5	46.4	Insufficient
Spain	481	13 714	98.2	98.2	Good
Sweden	197	12 467	91.7	92.8	Good
Türkiye	267	23 809	99.4	99.4	Good

¹ Due to low participation rates, a non-response adjustment was not implemented and the estimated population size, therefore, remains unknown.
 Note: A setting was deemed a participating setting if the leader returned their questionnaire with at least one question answered.

Table A B.6. Pre-primary education (ISCED level 02): Staff participation and recommended ratings

Participating country or subnational entity	Number of participating settings	Number of participating staff	Estimated size of staff population	Setting participation before replacement (%)	Setting participation after replacement (%)	Staff participation in participating settings (%)	Overall staff participation (%)	Recommended rating
Chile	143	741	54 091	70.7	79.5	88.0	70.0	Fair
Colombia	150	553	162 032	55.3	65.2	97.7	63.6	Poor
Denmark	148	946	27 274	54.9	81.3	89.5	72.8	Fair
Finland	204	1 386	42 851	92.4	97.1	95.4	92.7	Good
Flemish Community (Belgium)	164	1 143	21 469	66.3	86.3	89.4	77.2	Fair
Germany	142	810	456 372	47.2	72.1	82.2	59.3	Insufficient
Ireland	170	690	18 557	41.6	69.5	73.9	51.4	Insufficient
Israel	291	1 153	42 272	87.7	94.2	86.1	81.1	Good
Japan	189	1 283	317 235	71.4	95.0	98.9	93.9	Fair
Morocco	428	954	48 583	91.1	98.0	99.2	97.2	Good
New Zealand ¹	35	163	m	17.6	20.4	72.7	14.8	Insufficient
Norway	68	377	46 985	25.5	37.6	73.8	27.8	Insufficient
Spain	489	3 576	121 268	100.0	100.0	96.7	96.7	Good
Sweden	208	1 219	93 674	97.0	98.0	86.2	84.5	Good
Türkiye	265	1 289	93 250	97.8	97.8	98.4	96.2	Good

¹ Due to low participation rates, a non-response adjustment was not implemented and the estimated population size, therefore, remains unknown.

Note: A setting was deemed a participating setting if at least 33% of the selected staff returned their respective questionnaires with at least one question answered.

Notes regarding use and interpretation of the data

This section lists issues to be noted regarding the sampling or field operations that should be considered when interpreting the data reported for the following countries and subnational entities:

- **Flemish Community of Belgium**
 - For settings for children under age 3, settings without subsidy were excluded after the survey administration due to very low participation rates. They are not considered in the participation rate but contribute to the exclusion rate, which remained below 5% of staff.
- **Germany**
 - Home-based settings were excluded from the sample for settings for children under age 3, leading to an estimated exclusion rate of 6.5% of staff at this level of ECEC.
- **Ireland**
 - For both levels of ECEC, replacement settings were contacted before the participation of the originally sampled setting was defined. Consequently, replacements participated although the original setting participated as well. These replacements were moved into separate strata and treated as self-representing. They do not contribute to participation rates.
 - Home-based settings were excluded from the sample for settings for children under age 3. The exclusion rate remained below 5% of staff.

- **Israel**
 - Ultra-Orthodox settings did not participate in the survey at ISCED level 02 and were excluded after the survey administration. They are not considered in the participation rate but contribute to the exclusion rate, leading to an exclusion rate of 26.3% of pre-primary settings; the resulting staff exclusion rate is unknown.
- **Morocco**
 - Due to the very small size of ECEC settings (i.e. there are just one or two staff members in many settings), the sample size requirement for staff was reduced.
- **New Zealand**
 - *Te Kōhanga Reo* (Māori language immersion environments for children and families) did not participate in the survey at ISCED level 02, leading to an estimated staff exclusion rate of 12.8% for pre-primary staff. For settings for children under age 3, in addition to *Te Kōhanga Reo*, free kindergartens and playcentres did not participate in the survey, leading to an overall estimated staff exclusion rate of 29.8%.
- **Norway**
 - Home-based settings were excluded from the sample for settings for children under age 3. The exclusion rate remained below 5% of staff.
- **Quebec (Canada)**
 - Due to a high turnover in home-based childcare services during the time of recruitment for TALIS Starting Strong, notably attributable to demographic factors such as retirement, it is important to note that results for leaders/settings represent settings that were open in September 2022 and remained open at the beginning of 2024: At the time of data collection, 32% of home-based settings that had been selected for the sample were ineligible, mainly because they were closed.

References

- OECD (forthcoming), *Teaching and Learning International Survey (TALIS) 2024 Technical Report*, OECD Publishing, Paris, forthcoming. [1]
- OECD (forthcoming), *Teaching and Learning International Survey (TALIS) 2024 User's Guide*, OECD Publishing, Paris, forthcoming. [2]

Annex C. Technical notes on analyses in this report

Use of staff and setting weights

The statistics presented in this report were derived from data obtained through samples of settings, setting leaders and staff (see Annex B). For these statistics to describe a country or subnational entity they need to reflect the whole population from which they were drawn and not merely the sample used to collect them. Survey weights must therefore be used to obtain design-unbiased estimates of population or model parameters.

Final weights allow the production of country- or subnational entity-level estimates from the observed sample data. The estimation weight indicates how many population units are represented by a sampled unit. The final weight is the combination of many factors reflecting the probabilities of selection at the various stages of sampling and the response obtained at each stage. Other factors may also come into play as dictated by special conditions to maintain the unbiasedness of the estimates (e.g. adjustment for staff working in more than one centre). A detailed description of the sampling and weighting procedures can be found in the *TALIS Starting Strong 2024 Technical Report* (OECD, forthcoming^[1]).

Data from New Zealand were weighted differently. Due to sparse response that led to unanticipated exclusions for some segments of the target population these samples (both ISCED 02 and settings for children under age 3) cannot be adequately adjusted through weighting to represent early childhood education and care (ECEC) settings and staff in New Zealand overall. Nonetheless, staff and setting weights were applied to adjust for different probabilities of selection into the sample, but not to make the samples representative of the overall target population for New Zealand. Thus, estimates presented in this volume for New Zealand only represent respondents included in the sample and not the population targeted by the survey.

Statistics in this report that represent settings and statistics based solely on leader responses were estimated using leader weights (LEADERWGT). Leader weights are used to make the sample representative of the population of ECEC settings in each country and subnational entity (with the exception of New Zealand); results are not representative of the population of leaders. Results that represent staff, which are based only on responses of staff or on responses of staff and leaders (i.e. responses from setting leaders were merged with staff responses), were estimated using staff weights (STAFFWGT). Staff weights are used to make the sample representative of the population of ECEC staff in each country and subnational entity (with the exception of New Zealand).

Coverage of the sample

Not all respondents answer every question, either because they omit a response or give an invalid response. Coverage is defined as the weighted percentage of respondents who provide a valid answer to a given question in the survey, regardless of their answer. Coverage daggers are shown in every table to indicate the level of coverage: no symbol means at least 75% of the expected population was covered;

one dagger (†) means at least 50% but less than 75%; and a double-dagger (‡) means less than 50% was covered.

Coverage is calculated based on the section of the sample that could answer the relevant question in the survey. Some respondents did not have the possibility of answering some questions due to filters in the questionnaire (i.e. the question being not logically applicable) or to use of different versions of the questionnaire targeted to different types of setting leaders and staff (see the *TALIS Starting Strong 2024 Technical Report* for more detail (OECD, forthcoming^[1]). These respondents were excluded from coverage and estimate calculations. In addition, respondents in home-based settings were excluded from coverage and estimate calculations wherever the analysis was not appropriate for this type of setting. These exclusions are indicated in notes below the relevant tables in Annex D.

Standard errors and significance tests

Standard errors

The statistics in this report represent estimates based on samples of staff and settings, rather than values that could be calculated if every staff member and setting leader in every country or subnational entity had answered every question. Consequently, it is important to measure the degree of uncertainty of the estimates. In the Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) 2024, each estimate has an associated degree of uncertainty that is expressed through a standard error. The reported standard errors were computed with a Balanced Repeated Replication (BRR) method, which provides a simple way of producing a consistent estimator that takes into account the sampling strategies used in the survey (a detailed description can be found in the *TALIS Starting Strong 2024 Technical Report* (OECD, forthcoming^[1]). The use of confidence intervals provides a way to make inferences about the population statistics in a manner that reflects the uncertainty associated with the sample estimates. From an observed sample statistic and assuming a normal distribution, its corresponding confidence interval at the 95% level can be constructed as the estimated parameter, plus or minus 1.96 times the associated standard error. In this way, it can be inferred that the corresponding parameter for the population would lie within the confidence interval in 95 out of 100 replications of the measurement on different samples drawn from the same population.

Differences between sub-groups

Differences between sub-groups either for staff (e.g. teachers and assistants) or setting characteristics (e.g. settings with a high concentration of children from socio-economically disadvantaged homes and settings with a low concentration of children from socio-economically disadvantaged homes) were tested for statistical significance. All differences marked in bold in the data tables of this report are statistically significantly different from 0 at the 95% level. This means that differences were labelled as statistically significant when a difference of that size or greater, in either direction, would be observed less than 5% of the time in the sample estimates, if there were actually no difference in the corresponding population values. In the case of differences between sub-groups, standard errors were calculated by taking into account that the two sub-samples are not independent, with the help of the BRR method.

Statistics based on regressions

Country- and subnational entity-specific regression analyses were performed to examine the associations between different variables. TALIS Starting Strong 2024 used a multivariable regression model for linear and logistic regression analyses. The primary goal was to accurately estimate the independent contribution of each predictor while adjusting for potential confounders. This model allows expressing the outcome as

a function of all relevant variables simultaneously – where each coefficient (or odds ratio, OR) represents the expected change in the outcome (or in the likelihood of the outcome rather than the reference category, for ORs) when that predictor increases by one unit (or takes the indicated value rather than the reference category, for categorical variables), holding all other variables constant. Regression analyses presented in this report handle missing data by listwise deletion. The percentage of the sample on which the regression is estimated is indicated by the coverage signs presented in the tables (see above for details).

Two types of models were used in this volume. Multiple linear regression was used in those cases where the dependent (or outcome) variable was considered continuous, such as scales. Binary logistic regression was employed when the dependent (or outcome) variable was a binary categorical variable, such as a high versus a low share of children from socio-economically disadvantaged homes.

Linear regression models

Linear regression models were used where the dependent (or outcome) variable was continuous. The models were specified as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p + \epsilon$$

Where Y is the predicted variable, $X_1, X_2, \dots, X_p$ is the set of regressors, $\beta_1, \beta_2, \dots, \beta_p$ is the set of the coefficients that measure the strength of association, and ϵ is an error term. Coefficients presented in the tables are unstandardised, were estimated using the Ordinary Least Squares method and represent the expected change in the Y variable with a change in the predictor, holding all other predictors constant. The magnitude of the unstandardised coefficient linking a predictor and an outcome in a linear regression is referred to as the “strength of association.” If the predictor is a categorical or binary variable, the coefficient represents the change in Y associated with being in the specified category rather than the reference category. If the predictor is a continuous variable, the coefficient represents the change in Y associated with a one-unit change in the predictor. Associated standard errors were calculated using the BRR method. Coefficients were tested for difference from 0 at the 95% confidence level using a Student’s t-test. Coefficients are indicated to be statistically significantly different from 0 when an estimate of that size or greater, in either direction, would be observed less than 5% of the time in the sample estimates, if the corresponding population value were actually 0.

Logistic regression models (odds ratios)

Logistic regression (logit) models were used where the dependent (or outcome) variable was binary. The models were specified as follows:

$$\text{Logit}(\pi(y)) = \ln\left(\frac{\pi(y)}{1 - \pi(y)}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p + \epsilon$$

Where Y is the predicted variable, with probability $\pi(y)$ for outcome y instead of the reference category, $X_1, X_2, \dots, X_p$ is the set of regressors, $\beta_1, \beta_2, \dots, \beta_p$ is the set of the coefficients that measure the strength of association, and ϵ is an error term. Associated standard errors were calculated using the BRR method.

In the tables, logit coefficients are not reported directly. Instead, ORs are presented. The OR is a measure of the relative likelihood of a particular outcome across two groups. In this case, ORs are equivalent to the ratio between the probability of observing outcome y instead of the reference category when a predictor takes on a particular value instead of the reference category, and the probability of observing the same outcome in Y when the predictor does not take that value. Given that p_{XY} is the probability of observing a given outcome for Y given a particular value for X, the OR can be defined as follows:

$$OR = \frac{p_{11}/p_{12}}{p_{21}/p_{22}}$$

Where p_{11}/p_{12} represents the “odds” of observing the indicated outcome (1) rather than the reference category (2) in Y, when X takes on its indicated outcome (1); and p_{21}/p_{22} represents the “odds” of observing the outcome (1) rather than the reference category (2) in Y, when X takes on the value of its reference category (2).

If the predictor is a categorical or binary, the OR represents the change in likelihood of Y taking on value y rather than the reference category associated when the predictor takes the specified value rather than its reference category. If the predictor is continuous, the coefficient represents the change in the likelihood of Y taking on value y associated with a one-unit change in the predictor.

In this report, the OR is obtained by applying an exponential transformation to the estimated logit coefficient. Throughout the report, ORs were calculated as the exponential of the logit coefficient, so that for any regressor j and its associated coefficient β_j , its OR is:

$$OR_j = e^{\beta_j}$$

Since this transformation is non-linear, statistical inference is performed on the original coefficient rather than on the OR itself. Hypothesis tests (Student's t-tests) use the coefficient estimates and their standard errors. P-values are computed directly from the original coefficients and standard errors, using the inverse of the normal cumulative distribution function. This ensures accurate statistical inference and avoids errors that may arise from testing transformed values like ORs.

The same procedure can be applied to all predictors individually, with no modifications needed for each variable. The resulting p-value reflects the probability of observing an estimate of that size or greater, in either direction, if the true population logit coefficient were 0 (or the corresponding population OR were 1). In this report, ORs are indicated as statistically significant when an estimate of their associated logit coefficient of that size or greater, in either direction, would be observed less than 5% of the time in the sample estimates, if the corresponding population value for the logit coefficient were actually 0. This is equivalent to an associated p-value of less than 0.05.

Predictors used in all regressions

For each regression model, a consistent set of predictors (detailed below) and a more restricted set of predictors specific to the analytical goals of each model were included. The selection of predictors was grounded in substantive theory and prior research. This helped avoid overfitting and ensured that the included predictors have a meaningful interpretation. Multicollinearity was assessed by estimating bivariable variance inflation factors on the set of predictors used in all regressions. This analysis confirmed that the model's independent effects are estimable with acceptable precision.

Predictors in all staff models

- **Level of formal education:** Based on the highest level of formal education completed by staff (variable: SS2G11). It was grouped into three categories: secondary education or below (ISCED level 3 or below), post-secondary non-tertiary or short-cycle tertiary education (ISCED levels 4 or 5), and bachelor's degree or equivalent or higher (ISCED level 6 or higher; used as the reference category).
- **Experience:** Based on total experience as ECEC staff (variable: SS2G08B). It was grouped into three categories: 3 years or less, between 4 and 9 years, and 10 years or more (used as the reference category).
- **Employment status:** Based on the contract agreement staff have to work at their ECEC setting (variable: SS2G05). It was grouped into two categories: permanent employment and others (which

encompasses fixed-term, self-employed or no employment contract; used as the reference category).

- **Working hours:** Based on working hours of ECEC staff (variable: SS2G06). It was grouped into two categories: full-time and part-time (whether staff indicated working 50-90% of full-time hours or less than 50% of full-time hours; used as the reference category).
- **Staff role:** Based on the category that staff indicated best represents their role in general when working at their ECEC setting (variable: SS2G03). It was grouped into two categories: teacher or ECEC setting leader and all other staff roles (which encompasses assistants, staff for individual children, staff for special tasks, interns and others; used as the reference category).
- **Setting location:** Based on the ECEC setting's location (variable: SL2G13). It was grouped into two categories: a municipality with more than 15 000 people and a municipality with 15 000 people or less (used as the reference category).
- **Setting type of management:** Based on the organisation responsible for the day-to-day management of the ECEC setting (variable: SL2G19). It comprises two categories: publicly managed and privately managed (used as the reference category).
- **Setting size (or target group size) tertiles:** The position of the ECEC setting in the national distribution of ECEC setting size, based on the number of children enrolled in the ECEC setting (variable: SL2G25) at the setting level, or on the number of children in the target group (variable: SS2G35) at the target group level (relevant tables specify whether the setting size or target group size is used). Depending on the outcome, this variable refers either to the number of children enrolled in the ECEC setting or the number of children in the target group. The first [bottom] tertile was used as the reference category. Coefficients are therefore a comparison to the smallest ECEC settings (or target groups) in each country or subnational entity.
- **Number of staff per child in the setting (or target group) tertiles:** The position of the ECEC setting in the national distribution of number of staff per children, based on the sum of staff in the setting (based on variable: SL2G22) and the number of children enrolled in the setting (variable: SL2G25) at the setting level, or on the sum of staff in the target group (based on variable: SS2G34) and the number of children in the target group (variable: SS2G35) at the target group level (relevant tables specify whether the number of staff per child in the setting or target group is used). Depending on the outcome, this variable refers either to the number of staff per children in the ECEC setting or the number of staff per children in the target group. The first [bottom] tertile was used as the reference category. Coefficients are therefore a comparison to the ECEC settings (or target groups) where there are the fewest number of staff per child in each country or subnational entity.

Predictors in all setting/leader models

- **Level of formal education:** Based on the highest level of formal education completed by leaders (variable: SL2G03). It was grouped into three categories: short-cycle tertiary education or below (ISCED level 5 or below), bachelor's degree or equivalent (ISCED level 6), and master's degree or equivalent or higher (ISCED level 7 or higher; used as the reference category).
- **Experience:** Based on total experience as an ECEC setting leader (variable: SL2G05B). It was grouped into three categories: 3 years or less, between 4 and 9 years, and 0 years or more (used as the reference category).
- **Setting location:** Based on the ECEC setting's location (variable: SL2G13). It was grouped into two categories: a municipality with more than 15 000 people and a municipality with 15 000 people or less (used as the reference category).

- **Setting type of management:** Based on the organisation responsible for the day-to-day management of the ECEC setting (variable: SL2G19). It comprises two categories: publicly managed and privately managed (used as the reference category).
- **Setting size tertiles:** The position of the ECEC setting in the national distribution of ECEC setting size, based on the number of children enrolled in the ECEC setting (variable: SL2G25) at the setting level. For ECEC setting/leader outcomes, this variable refers to the number of children enrolled in the ECEC setting. The first [bottom] tertile was used as the reference category. Coefficients are therefore a comparison to the smallest ECEC settings in each country or subnational entity.
- **Number of staff per child in the setting tertiles:** The position of the ECEC setting in the national distribution of number of staff per children, based on the sum of staff in the setting (based on variable: SL2G22) and the number of children enrolled in the setting (variable: SL2G25) at the setting level. For ECEC setting/leader outcomes, this variable refers to the number of staff per child in the ECEC setting. The first [bottom] tertile was used as the reference category. Coefficients are therefore a comparison to the ECEC settings where there are the fewest number of staff per child in each country or subnational entity.

Use of complex variables

Setting (or target group) size

Tertiles refer to 3 groups comprised approximately between the 1st and 33rd percentiles (first [bottom] tertile), the 34th and the 66th percentiles, and the 67th and 100th percentiles, in the weighted distribution of setting (or target group) size. Setting size is the number of children enrolled in the ECEC setting (variable: SL2G25). Target group size is the number of children in the target group (variable: SS2G35). Tertiles were calculated within each country and subnational entity, meaning that the values that go into each percentile vary with each country and subnational entity. These tertiles are of **unequal size** but of **equal value**, meaning that they group all observations with the same value in the same bin (typically the lower one). Therefore, the number of (weighted) observations in each bin is different, but all observations with the same value of setting (or target group) size are grouped in the same bin. For the setting size tertiles in Quebec (Canada), a further recoding was done, grouping all settings with less than 10 children enrolled, and dividing the rest of the settings (ranging from 29 to 191 enrolled children) into 2 similar-size groups. This procedure creates “tertiles” that are of very unequal (weighted) size, but have a clear cut in values, fit for analytical purposes.

Number of staff per child in the setting (or target group)

Tertiles refer to 3 groups comprised approximately between the 1st and 33rd percentiles, the 34th and the 66th percentiles, and the 67th and 100th percentiles, in the weighted distribution of staff per child in the setting (or in the target group). Staff per child in the setting is the number of staff working in the setting (sum of items A-D of variable SL2G22) divided by the number of children enrolled in the ECEC setting (variable: SL2G25). Staff per child in the target group is the number of staff in the target group (the sum of items A-D of variable SS2G34) divided by the number of children in the target group (variable: SS2G35). Tertiles were calculated within each country and subnational entity, meaning that the values that go into each percentile vary with each country and subnational entity. These tertiles are of **unequal size** but of **equal value**, meaning that they group all observations with the same value in the same bin (typically the lower one). Therefore, the number of (weighted) observations in each bin is different, but all observations with the same value of setting (or target group) size are grouped in the same bin.

Proportions of children with various characteristics in the setting (or target group)

Proportion variables were created to represent the share of children with specific characteristics (eight different characteristics captured in SL2G27a-h) relative to the total number of children in the setting (SL2G25) or the share of children with specific characteristics (five different characteristics captured in SS2G36a-e) relative to the total number of children in the target group (SS2G35). Each proportion was calculated as $(SL2G27x/SL2G25) \times 100$ for the setting and $(SS2G36x/SS2G35) \times 100$ for the target group. Values resulting from division by zero or exceeding 125% were set to missing. The threshold of 125% was chosen instead of 100% because, during the cleaning process, the interrelation between the pairs of variables was intentionally relaxed to retain as many valid values as possible. Categorical dummy variables were then generated from the proportions, coded as 0 for less than 10% and 1 for 10% or more. Specific characteristics could overlap, meaning a child could be counted in more than one category.

Staff working hours and reasons for part-time work

Staff working hours and reasons for part-time work refers to the current working hours of staff as full time or part time (variable: SS2G06) and, in case of part-time work, the reason for part-time work (variable: SS2G07). It has three categories: full time, voluntary part time and involuntary part time. An ECEC staff is considered to be working full time when they indicated full-time working hours in SS2G06. An ECEC staff is considered to be voluntarily working part time when they indicated either part time in SS2G06 or their answer was omitted or invalid, and answered they were only looking for part-time work in SS2G07. An ECEC staff is considered to be involuntarily working part time when they indicated either part time in SS2G06 or their answer was omitted or invalid, and answered they were only offered part-time work in SS2G07.

Type of management and profit status

The categorical variable “type of management and profit status” was derived to represent the combined classification of management type and profit status for each setting (SL2G19 and SL2G21). Three categories were generated: publicly managed settings, privately managed for-profit settings and privately managed non-profit settings. Settings were classified as publicly managed cases regardless of their profit status if the leader indicated public management in SL2G19.

Use of scales

Several scales are used in this report, in particular in regression analyses. TALIS Starting Strong 2024 scales were constructed using the same international model parameters to be statistically equivalent across countries and subnational entities, facilitating scale score comparability across ECEC systems. In general, scale scores created for TALIS Starting Strong 2024 can be used in different types of analyses, including comparisons of country and subnational entity means for each individual scale.

TALIS Starting Strong 2024 scale scores are standardised to have a standard deviation of 2 across all education systems participating in TALIS Starting Strong 2024. A value of 10 corresponds to the item mid-point value of the response scale. A detailed description of the construction and validation of TALIS Starting Strong 2024 scales can be found in Chapter 11 of the *TALIS 2024 Technical Report* (OECD, forthcoming^[1]).

Adequacy of physical space

The scale of “adequacy of physical space” (S2LSQSET; referred to as “Structural quality: Adequacy of setting” in the *TALIS 2024 Technical Report* (OECD, forthcoming^[1])) was constructed using leader

responses (“strongly disagree”, “disagree”, “agree”, “strongly agree”) to seven statements which apply to their ECEC setting (SL2G28A, SL2G28B, SL2G28C, SL2G28D, SL2G28E, SL2G28F and SL2G28G): “There is adequate ventilation for healthy airflow”; “There is an adequate amount of furniture for each child (e.g. chairs, tables)”; “Indoor space is arranged so that children can easily move around”; “The background noise level in the classroom/playgroup/group does not interfere with interactions”; “The roof, ceiling, walls and floor are in good shape (e.g. have no leaks, mould)”; “Children can access a bathroom easily”; and “Outdoor space is arranged so that children can easily move around”. Higher scores on this scale indicate more positive perceptions of the physical space in the ECEC setting.

Barriers to structural quality: Adequacy of physical resources

The scale of “barriers to structural quality: adequacy of physical resources” (S2LSQPRS) was constructed using leaders’ responses (“not at all”, “to some extent”, “quite a bit”, “a lot”) to four statements on issues with the availability of physical resources that hinder the setting’s capacity to provide a quality environment for children’s development, well-being and learning (SL2G42A, SL2G42B, SL2G42C and SL2G42D): “Shortage or inadequacy of play or learning materials (e.g. picture books, building blocks, paint)”; “Shortage or inadequacy of indoor space”; “Shortage or inadequacy of outdoor play space”; and “Shortage or inadequacy of digital resources and tools”. Higher scores on this scale indicate greater perceived barriers to structural quality related to the adequacy of physical resources.

Barriers to structural quality: Adequacy of staffing

The scale of “barriers to structural quality: adequacy of staffing” (S2LSQSTA) was constructed using leaders’ responses (“not at all”, “to some extent”, “quite a bit”, “a lot”) on staffing issues that hinder the setting’s capacity to provide a quality environment for children’s development, well-being and learning (SL2G42I, SL2G42J, SL2G42K, SL2G42L, SL2G42M, SL2G42N and SL2G42O): “<ECEC staff> absences”; “Lack of opportunities or support for <ECEC staff>’s professional development”; “Shortage of <ECEC staff> with competence in working with children from <socio-economically disadvantaged homes>”; “Shortage of <ECEC staff> with competence in working with children with special education needs”; “Shortage of <ECEC staff> with competence in working with children speaking a language other than the language(s) used in the <ECEC setting>”; “Shortage of qualified staff”; and “Shortage of staff relative to the number of enrolled children”. This scale is available only for pre-primary settings. Higher scores on this scale reflect greater perceived barriers to structural quality in relation to staffing adequacy.

Behavioural support in the classroom/playroom

The scale of “behavioural support in the classroom/playroom” (S2SOCIALR) was constructed using staff responses (“never”, “rarely”, “occasionally”, “often”, “always”) to five statements which apply to their work in the target group at their ECEC setting (SS2G41A, SS2G41B, SS2G41C, SS2G41D and SS2G41F): “I explained the rules children should follow at the start of a new activity”; “I addressed children’s disruptive behaviour by explaining why they should stop”; “I showed appreciation to children that behaved well during an activity”; “I helped children understand the consequences if they did not follow the rules”; and “I redirected a child to an appropriate activity if they were disturbing other children”. Higher scores on this scale reflect a greater level of behavioural support provided in the classroom/playroom.

Child-centred planning

The scale of “child-centred planning” (S2CCAFL) was constructed using staff responses (“not at all”, “once a week”, “a few times a week”, “once a day”, “more than once a day”) to four statements about how frequently they used the following practices in their work during the most recent complete calendar week (SS2G32D, SS2G32E, SS2G32F and SS2G32G): “Intentionally organised the

<classroom/playgroup/group> to facilitate children's exploration and play"; "Planned activities designed to allow children to take the initiative"; "Involved children in making plans for the day"; and "Adapted daily activities in response to children's natural rhythms (e.g. hunger, fatigue)". Higher scores on this scale indicate a greater frequency of use of child-centred approaches to planning.

Daily adaptive pedagogical practices

The scale of "daily adaptive pedagogical practices" (S2PRACTR) was constructed using staff responses ("never", "rarely", "occasionally", "often", "always") to five statements which apply to their work in the target group at their ECEC setting (SS2G40A, SS2G40B, SS2G40C, SS2G40E and SS2G40F): "I explained how a new activity relates to children's lives"; "I gave different activities to suit different children's interests"; "I gave different activities to suit different children's levels of development"; "I recognised children's individual interests regardless of gender"; and "I adapted my activities to meet the needs of dual/second language learners". Higher values on this scale reflect greater use of daily adaptive pedagogical practices.

Distributed leadership

The scale of "distributed leadership" (S2LDLEAD) was constructed using leaders' responses ("not at all", "to some extent", "quite a bit", "a lot") to six statements on leadership practices (SL2G41A, SL2G41B, SL2G41C, SL2G41D, SL2G41F and SL2G41G): "<ECEC staff> have opportunities to actively participate in <ECEC setting> decisions"; "Parents or guardians have opportunities to actively participate in <ECEC setting> decisions"; "Children have opportunities to actively participate in decisions"; "There is a culture of shared responsibility for <ECEC setting> issues"; "There is a collaborative <ECEC setting> culture which is characterised by mutual support"; and "This <ECEC setting> encourages staff to lead new initiatives". Higher scores in this scale indicate greater distributed leadership within the ECEC setting.

Engagement in collaborative practices

The scale of "engagement in collaborative practices" (S2COLLR) was constructed using staff responses ("never", "less than monthly", "monthly", "weekly", "daily") to five statements on collaborative practices they engage in (SS2G42A, SS2G42B, SS2G42C, SS2G42D and SS2G42F): "Provide feedback to other <ECEC staff> about their practice"; "Engage in joint activities across different groups, including age groups"; "Exchange learning or pedagogical materials with colleagues"; "Co-design activities or content for children's development, well-being and learning with colleagues"; and "Discuss the evaluation of children's development, well-being and learning with other <ECEC staff>". Higher values on this scale indicate a greater level of engagement in collaborative practices.

Facilitating emotional development

The scale of "facilitating emotional development" (S2PREMR) was constructed using staff responses ("not at all", "once a week", "a few times a week", "once a day", "more than once a day") to three statements about how frequently they used the following practices in their work during the most recent complete calendar week (SS2G33A, SS2G33B and SS2G33D): "Talked with children about feelings"; "Helped children understand their feelings (e.g. when they are excited)"; and "Helped children express their feelings". Higher values on this scale reflect more frequent activities to facilitate the emotional development of children.

Facilitating language development

The scale of "facilitating language development" (S2PRLANR) was constructed using staff responses ("never", "rarely", "occasionally", "often", "always") to five statements which apply to their work in the target

group at their ECEC setting (SS2G39A, SS2G39B, SS2G39C, SS2G39D and SS2G39F): “I encouraged children to lead conversations”; “I asked supportive questions to encourage children to give longer explanations”; “I supported children to express their ideas by asking them questions”; “I rephrased or repeated statements to make sure I understood the children”; and “I used words or phrasing that was new to children”. Higher scores on this scale reflect more activities aimed at facilitating language development among children.

Facilitating literacy development

The scale of “facilitating literacy development” (S2PROLIR) was constructed using staff responses (“not at all”, “once a week”, “a few times a week”, “once a day”, “more than once a day”) to seven statements about how frequently they used the following practices in their work during the most recent complete calendar week (SS2G29A, SS2G29B, SS2G29D, SS2G29E, SS2G29F, SS2G29G and SS2G29H): “Played word games with the children”; “Read books to children”; “Encouraged pre-verbal children to point to pictures when looking at a book”; “Sang songs with or to the children”; “Engaged children in activities that helped them pick out sounds in words (e.g. phonics games)”; “Used synonyms for words to help explain their meaning when talking with children”; and “Used activities for children to make marks (e.g. finger painting, pressing into dough/playdough)”. Higher scores on this scale reflect more frequent activities aimed at facilitating literacy development among children.

Facilitating numeracy development

The scale of “facilitating numeracy development” (S2PRONUR) was constructed using staff responses (“not at all”, “once a week”, “a few times a week”, “once a day”, “more than once a day”) to five statements about how frequently they used the following practices in their work during the most recent complete calendar week (SS2G30A, SS2G30B, SS2G30C, SS2G30D and SS2G30F): “Used sorting activities by shape or colour”; “Played number games”; “Sang songs with numbers”; “Helped children to use numbers or to count”; and “Encouraged children to measure items (e.g. while cooking or building with blocks)”. Higher values on this scale indicate more frequent engagement in activities that support children’s numeracy development.

Facilitating parent/guardian engagement

The scale of “facilitating parent/guardian engagement” (S2PARENUR) was constructed using staff responses (“strongly disagree”, “disagree”, “agree”, “strongly agree”) to five statements on parent/guardian engagement practices as applied to their ECEC setting (SS2G43A, SS2G43C, SS2G43D, SS2G43E and SS2G43F): “Parents or guardians are informed about daily activities on a regular basis”; “Parents or guardians are encouraged by <ECEC staff> to participate in regular classroom/playgroup/group activities”; “Parents or guardians are encouraged by <ECEC staff> to contribute to classroom/playgroup/group level decisions”; “Parents or guardians are encouraged by <ECEC staff> to take on ECEC setting-level tasks”; and “Parents or guardians are given opportunities to actively participate in ECEC setting decisions”. Higher scores on this scale indicate that <ECEC staff> agree more strongly that parent/guardian engagement is supported in their ECEC setting.

Facilitating play

The scale of “facilitating play” (S2PRINTR) was constructed using staff responses (“not at all”, “once a week”, “a few times a week”, “once a day”, “more than once a day”) to three statements about how frequently they used the following practices in their work during the most recent complete calendar week (SS2G32A, SS2G32B and SS2G32C): “Allowed children to take the lead when I played with them”; “Responded positively to non-verbal invitations to play (e.g. a child passing me a toy)”; and “Let a child

play alone if they were deeply engaged in play". Higher values on this scale reflect more frequent activities to facilitate play among children.

Facilitating prosocial behaviour

The scale of "facilitating prosocial behaviour" (S2PRSOC) was constructed using staff responses ("not at all", "once a week", "a few times a week", "once a day", "more than once a day") to four statements about how frequently they used the following practices in their work during the most recent complete calendar week (SS2G31A, SS2G31B, SS2G31C and SS2G31D): "Encouraged sharing amongst children"; "Encouraged children if they helped each other"; "Encouraged children playing in small groups to include other children"; and "Encouraged children if they comforted each other". Higher values on this scale indicate a higher frequency of activities that facilitate prosocial behaviour among children.

Leader innovations in the ECEC setting

The scale of "leader innovations in the ECEC setting" (S2LEADSPL2) was constructed using leader responses ("never", "less than monthly", "monthly", "weekly", "daily") to three statements on leadership practices they engage in (SL2G32F, SL2G32G and SL2G32H): "I worked on developing, revising or communicating a <vision> for this ECEC setting"; "I made changes in <ECEC setting> policies or practices based on monitoring results and external evaluation"; and "I facilitated improvements in the indoor or outdoor space used for children's development, well-being and learning". Higher scores on this scale reflect a greater frequency of innovative leadership practices within the ECEC setting.

Leader support for staff in pedagogical learning

The scale of "leader support for staff in pedagogical learning" (S2LEADSPL1) was constructed using leaders' responses ("never", "less than monthly", "monthly", "weekly", "daily") to four statements on how often they engaged in various leadership activities over the past year (SL2G32A, SL2G32B, SL2G32C and SL2G32D): "I collaborated with <ECEC staff> to improve how children play together"; "I observed <ECEC staff> practices and staff-child interactions"; "I provided feedback to <ECEC staff> based on my observations"; and "I took actions to support co-operation among <ECEC staff> to develop new approaches to ECEC practices". Higher scores on this scale indicate more frequent leadership practices aimed at supporting the pedagogical learning of ECEC staff.

Level of stress and its impact on staff well-being

The scale of "level of stress and its impact on staff well-being" (S2STRESS) was constructed using staff responses ("not at all", "to some extent", "quite a bit", "a lot") to four statements about their experience as an <ECEC staff> at their ECEC setting (SS2G46A, SS2G46B, SS2G46C and SS2G46D): "I experience stress in my work"; "My job leaves me time for my personal life"; "My job negatively impacts my mental health"; and "My job negatively impacts my physical health". Higher scores reflect greater perceived stress (and less perceived well-being).

Neighbourhood environment

The scale of "neighbourhood environment" (S2LNIGHBR) was constructed using leader responses ("strongly disagree", "disagree", "agree", "strongly agree") to five statements which apply to their ECEC setting (SL2G14A, SL2G14B, SL2G14C, SL2G14D and SL2G14F): "There is litter lying around"; "There is vandalism"; "People from diverse backgrounds experience insults or attacks (e.g. different ethnicity or culture, migrant background, sexual or gender minorities)"; "There are public places where children can

play safely”; and “There are drug-related problems”. Higher values on this scale indicate more critical, or negative, perceptions of the neighbourhood environment.

Promoting awareness and acceptance of diversity

The scale of “promoting awareness and acceptance of diversity” (S2PAAD) was constructed using staff responses (“not at all”, “to some extent”, “quite a bit”, “a lot”) on the applicability of five statements to the ECEC setting (SS2G23A, SS2G23C, SS2G23D, SS2G23E and SS2G23G): “Books and pictures feature people from a variety of ethnic and cultural groups”; “Books and pictures feature people with different physical needs”; “Books and pictures feature diverse family structures (e.g. single parent families, families with parents from sexual or gender minorities)”; “Children play with toys and artefacts from cultures other than the ethnic majority”; and “Activities aim to raise awareness about the different languages of the <dual/second language learners> in the <classroom/playgroup/group>”. Higher scores on this scale indicate a stronger emphasis on promotion awareness and acceptance of diversity.

Satisfaction with setting leadership

The scale of “satisfaction with setting leadership” (S2SSLEAD) was constructed using staff responses (“strongly disagree”, “disagree”, “agree”, “strongly agree”) to seven statements on the ECEC setting leadership (SS2G44A, SS2G44B, SS2G44C, SS2G44D, SS2G44E, SS2G44F and SS2G44G): “The <ECEC setting leader> has a clear vision for this ECEC setting”; “The <ECEC setting leader> encourages co-operation among <ECEC staff> to develop new ideas in their practices”; “The <ECEC setting leader> encourages <ECEC staff> to take responsibility for improving their practices”; “The <ECEC setting leader> encourages all staff to have a say on important decisions”; “The <ECEC setting leader> promotes a culture of shared professional learning”; “The <ECEC setting leader> communicates effectively with <ECEC staff>”; and “I need more support from my <ECEC setting leader>”. Higher scores on this scale reflect greater satisfaction with the leadership at the ECEC setting.

Satisfaction with work at this ECEC setting

The scale of “satisfaction with work at this ECEC setting” (S2JOBSAR) was constructed using staff responses (“strongly disagree”, “disagree”, “agree”, “strongly agree”) to four statements about their experience as an ECEC staff at their ECEC setting (SS2G45C, SS2G45E, SS2G45F and SS2G45G): “I enjoy working at this <ECEC setting>”; “I am satisfied with the support that I receive from parents or guardians in this <ECEC setting>”; “I would recommend this <ECEC setting> as a good place to work”; and “I would like to change to another <ECEC setting> if that were possible”. Higher scores indicate greater satisfaction with work at the ECEC setting.

Self-efficacy, overall

The scale “self-efficacy, overall” (S2SELF) was constructed using staff responses (“not at all”, “to some extent”, “quite a bit”, “a lot”) to ten statements about the different tasks they could do in their work with children (SS2G24A, SS2G24B, SS2G24C, SS2G24D, SS2G24E, SS2G24F, SS2G24G, SS2G24H, SS2G24I and SS2G24J): “Support the development of children from disadvantaged backgrounds”; “Adapt your work to individual child needs”; “Help children develop their capacity to learn independently”; “Help children prepare for transitioning to other <ECEC settings> or to <ISCED 2011 level 1> schools”; “Stimulate children’s interest in cultural differences and commonalities”; “Help children to interact with each other and show good social behaviour (e.g. sharing, helping others)”; “Help children develop creativity and problem solving”; “Use <digital resources and tools> to facilitate working with children”; “Provide all children with a feeling of security”; and “Use a variety of monitoring and assessment strategies to follow children’s development, well-being and learning”. Higher values on this scale indicate greater perceived self-efficacy.

Sources of work stress: Aspects related to capacity, resources and time

The scale of “sources of work stress: aspects related to capacity, resources and time” (S2STRESO) as constructed using staff responses (“not at all”, “to some extent”, “quite a bit”, “a lot”) to five statements about the sources of stress at their ECEC setting (SS2G47C, SS2G47D, SS2G47G, SS2G47J and SS2G47L): “Having too much administrative work to do (e.g. filling out forms)”; “Having extra duties due to absent <ECEC staff>”; “Addressing parent or guardian concerns”; “Having too many tasks to do at the same time”; and “Lacking resources (e.g. financial support, material resources)”. Higher scores in this scale indicate greater perceived stress in terms of capacity, resources and time.

Sources of work stress: Aspects specific to children’s development, well-being and learning

The “scale of sources of work stress: aspects specific to children’s development”, well-being and learning (S2STRESC) as constructed using staff responses (“not at all”, “to some extent”, “quite a bit”, “a lot”) to five statements about the sources of stress at their ECEC setting (SS2G47E, SS2G47F, SS2G47H, SS2G47I and SS2G47K): “Being held responsible for children’s development, well-being and learning”; “Managing <classroom/playgroup/group> behaviour”; “Accommodating children with special education needs”; “Having too many children in my <classroom/playgroup/group>”; and “Having to adapt my practices with children due to unexpected disruptions (e.g. natural disasters, public health emergencies/pandemics, humanitarian crises)”. Higher scores indicate greater perceived stress in relation to children’s development, well-being and learning.

Reference

- OECD (forthcoming), *Teaching and Learning International Survey (TALIS) 2024 Technical Report*, OECD Publishing, Paris, forthcoming. [1]

Annex D. List of tables available online

The following tables are available in electronic form only.

Table A D.1. Chapter 1: Strengthening early childhood education and care: Overview of results from TALIS Starting Strong 2024

Table D.1.	
Table D.1.1	Staff beliefs about preparing children for life in the future
Table D.1.2	Staff spending priorities for the early childhood education and care sector
Table D.1.2	Barriers to quality provision in early childhood education and care settings

StatLink  <https://stat.link/woi6tp>

Table A D.2. Chapter 2: Building a strong early childhood education and care workforce

Table D.2.	
Table D.2.1	Staff roles in early childhood education and care settings
Table D.2.2	Female staff in early childhood education and care settings, by staff role
Table D.2.3	Leader gender and age
Table D.2.4	Staff age, by staff role
Table D.2.5	Education and training programs that prepared staff to work with children, by staff role
Table D.2.6	Staff educational attainment, by staff role
Table D.2.7	Leader educational attainment
Table D.2.8	Staff work experience, by staff role
Table D.2.9	Staff total work experience in early childhood education and care settings, by staff age
Table D.2.10	Staff total work experience in early childhood education and care settings, by staff role
Table D.2.11	Staff total work experience in early childhood education and care settings, by staff educational attainment
Table D.2.12	Leader work experience
Table D.2.13	Staff employment status in early childhood education and care settings, by staff role
Table D.2.14	Staff working hours in early childhood education and care settings, by staff role
Table D.2.15	Staff employment status in early childhood education and care settings, by staff working hours
Table D.2.16	Staff who work in more than one early childhood education and care setting, by staff role
Table D.2.17	Leaders who work in more than one early childhood education and care setting
Table D.2.18	Leader working hours in early childhood education and care settings

StatLink  <https://stat.link/aor753>

Table A D.3. Chapter 3: Structural features of high-quality early childhood education and care

Table D.3.	
Table D.3.1	Type of setting and questionnaire type in TALIS Starting Strong 2024
Table D.3.2	Type of management, profit and chain status of early childhood education and care settings
Table D.3.3	Link between type of management and profit status of early childhood education and care settings
Table D.3.4	Sources of funding in early childhood education and care settings, by type of management and profit status
Table D.3.5	Neighbourhood around early childhood education and care settings
Table D.3.6	Characteristics of early childhood education and care settings, by type of management and profit status
Table D.3.7	Physical space of early childhood education and care settings
Table D.3.8	Number of staff per child in early childhood education and care settings
Table D.3.9	Organisation of the work with children in early childhood education and care settings, by type of management and profit status
Table D.3.10	Characteristics of children in early childhood education and care settings
Table D.3.11	Children under age 3 in early childhood education and care settings, by type of management and profit status
Table D.3.12	Children with different home language(s) in early childhood education and care settings, by type of management
Table D.3.13	Children with special education needs in early childhood education and care settings, by type of management
Table D.3.14	Children from socio-economically disadvantaged homes in early childhood education and care settings, by type of management
Table D.3.15	Children who are immigrants or with migrant backgrounds in early childhood education and care settings, by type of management
Table D.3.16	Children who are refugees in early childhood education and care settings, by type of management
Table D.3.17	Children belonging to ethnic/national minorities or indigenous communities in early childhood education and care settings, by type of management
Table D.3.18	Children with diverse characteristics in early childhood education and care settings, by type of management and profit status
Table D.3.19	Staff turnover and absences in early childhood education and care settings
Table D.3.20	Unmet demand for early childhood education and care, by type of management and profit status

StatLink  <https://stat.link/v8bng9>

Table A D.4. Chapter 4: Staff practices with children and time use in early childhood education and care settings

Table D.4.	
Table D.4.1	Hours worked for staff working full-time
Table D.4.2	Time spent in direct contact and without contact with children
Table D.4.3	Time spent on various tasks
Table D.4.4	Hours spent on various tasks, by national tertile of total time spent on work-related tasks
Table D.4.5	Staff practices to facilitate pro-social behaviour in early childhood education and care settings
Table D.4.6	Staff practices to facilitate emotional development in early childhood education and care settings
Table D.4.7	Staff practices to facilitate play and child-centred planning in early childhood education and care settings
Table D.4.8	Staff practices to facilitate literacy development in early childhood education and care settings
Table D.4.9	Staff practices to facilitate numeracy development in early childhood education and care settings
Table D.4.10	Staff practices to facilitate language development in the target group
Table D.4.11	Staff use of adaptive pedagogical practices in the target group
Table D.4.12	Behavioural support strategies in the classroom/playroom in the target group
Table D.4.13	Relationship between facilitating prosocial behaviour and percentage of time at this setting spent on different tasks
Table D.4.14	Relationship between facilitating emotional development and percentage of time at this setting spent on different tasks
Table D.4.15	Relationship between facilitating play and percentage of time at this setting spent on different tasks
Table D.4.16	Relationship between child-centred planning and percentage of time at this setting spent on different tasks
Table D.4.17	Relationship between staff practices to facilitate literacy development and percentage of time at this setting spent on different tasks
Table D.4.18	Relationship between facilitating numeracy development and percentage of time at this setting spent on different tasks

Table D.4.19	Relationship between facilitating language development and percentage of time at this setting spent on different tasks
Table D.4.20	Relationship between daily adaptive pedagogical practices and percentage of time at this setting spent on different tasks
Table D.4.21	Relationship between behavioural support in the classroom/playroom and percentage of time at this setting spent on different tasks

StatLink  <https://stat.link/a5v0n3>

Table A D.5. Chapter 5: Building awareness and acceptance of diversity in early childhood education and care settings through staff practices and engagement with families

Table D.5.	
Table D.5.1	Staff practices to promote awareness and acceptance of diversity in early childhood education and care settings
Table D.5.2	Relationship between staff practices to promote awareness and acceptance of diversity and children's characteristics in early childhood education and care settings
Table D.5.3	Relationship between child-centred planning and characteristics of early childhood education and care staff, settings and target groups
Table D.5.4	Relationship between daily adaptive pedagogical practices and characteristics of early childhood education and care staff, settings and target groups
Table D.5.5	Staff languages for communication with parents or guardians, by language background of children in early childhood education and care settings
Table D.5.6	Staff languages, by language background of children in early childhood education and care settings
Table D.5.7	Early childhood education and care settings' policies and practices in relation to diversity
Table D.5.8	Staff languages in early childhood education and care settings, by staff role
Table D.5.9	Staff spending priorities to support dual/second language learners, by language background of children in early childhood education and care settings
Table D.5.10	Staff spending priorities to support children with special education needs, by special education needs of children in early childhood education and care settings
Table D.5.11	Staff spending priorities to support children from disadvantaged backgrounds, by socio-economic background of children in early childhood education and care settings
Table D.5.12	Staff activities to raise awareness about different languages, by language background of children in early childhood education and care settings
Table D.5.13	Staff practices to facilitate parent/guardian engagement in early childhood education and care settings
Table D.5.14	Collaboration and communication with external actors in early childhood education and care settings
Table D.5.15	Early childhood education and care settings' practices to facilitate parent/guardian engagement
Table D.5.16	Relationship between staff practices to facilitate parent/guardian engagement and children's characteristics in early childhood education and care settings

StatLink  <https://stat.link/2160dq>

Table A D.6. Chapter 6: Developing early childhood education and care staff expertise

Table D.6.	
Table D.6.1	Breadth of content of staff initial education or training programmes, by staff characteristics
Table D.6.2	Staff professional development activities, by staff total work experience in early childhood education and care settings
Table D.6.3	Staff professional development activities, by staff educational attainment and training to work with children
Table D.6.4	Breadth and alignment of staff education and training, by staff work experience
Table D.6.5	Number of professional development activities in which staff participated
Table D.6.6	Delivery mode of staff participation in professional development activities
Table D.6.7	Perceived impact of professional development activities, by participation mode
Table D.6.8	Staff professional development activities, by staff role
Table D.6.9	Relationship between insufficient staff to fill-in staff absence being a barrier to professional development and staff and setting characteristics
Table D.6.10	Support for staff participation in professional development activities, by staff role
Table D.6.11	Relationship between staff participation in job-embedded training and collaborative learning and various factors and staff and setting characteristics

Table D.6.12	Relationship between staff participation in planned visits to other classrooms or groups and various factors and staff and setting characteristics
Table D.6.13	Relationship between staff participation in induction or orientation programmes and various factors and staff and setting characteristics
Table D.6.14	Novice staff induction or orientation activities at early childhood education and care settings
Table D.6.15	Relationship between staff participation in coaching programmes and various factors and staff and setting characteristics
Table D.6.16	Relationship between cost being a barrier to professional development and staff and setting characteristics
Table D.6.17	Relationship between lack of time for professional development activities and staff and setting characteristics
Table D.6.18	Relationship between professional development conflicts with work schedule and staff and setting characteristics
Table D.6.19	Relationship between lack of incentives as a barrier to professional development and staff and setting characteristics
Table D.6.20	Support for staff participation in professional development activities, by staff total work experience in early childhood education and care settings
Table D.6.21	Relationship between staff scale of self-efficacy and staff and setting characteristics
Table D.6.22	Relationship between staff scale of self-efficacy and professional development activities and staff and setting characteristics
Table D.6.23	Relationship between staff scale of self-efficacy and both staff initial education or training programmes and staff professional development activities and staff and setting characteristics
Table D.6.24	Relationship between need for professional development on working with children whose home language(s) is/are different from the one used at the ECEC setting and staff and setting characteristics
Table D.6.25	Relationship between need for professional development on working with children with special education needs and staff and setting characteristics

StatLink  <https://stat.link/z3jo8b>

Table A D.7. Chapter 7: Developing leadership in early childhood education and care settings

Table D.7.	
Table D.7.1	Leader professional development activities
Table D.7.2	Leader professional development activities, by leader work experience
Table D.7.3	Leader professional development needs
Table D.7.4	Leader professional development needs, by leader work experience
Table D.7.5	Responsibilities for tasks in early childhood education and care settings
Table D.7.6	Responsibilities for tasks in early childhood education and care settings, by type of management
Table D.7.7	Responsibilities for tasks in early childhood education and care settings, by setting funding status
Table D.7.8	Responsibilities for tasks in early childhood education and care settings, by setting chain/franchise/network status
Table D.7.9	Leader need for support from government authorities, by level of leader responsibilities for tasks in early childhood education and care settings
Table D.7.10	Leader decision making, by level of leader responsibilities for tasks in early childhood education and care settings
Table D.7.11	Relationship between distributed leadership and characteristics of early childhood education and care leader and settings
Table D.7.12	Relationship between staff satisfaction with the setting leadership and characteristics of early childhood education and care leaders, staff and settings
Table D.7.13	Relationship between leader support for staff pedagogical learning and characteristics of early childhood education and care leaders and settings
Table D.7.14	Relationship between leader innovations in the setting and characteristics of early childhood education and care leaders and settings

StatLink  <https://stat.link/f3i7wc>

Table A D.8. Chapter 8: Retaining early childhood education and care staff

Table D.8.	
Table D.8.1	Barriers to quality provision in early childhood education and care settings, by type of management and profit status
Table D.8.2	Staff job satisfaction, by staff role
Table D.8.3	Staff job satisfaction, by staff total work experience in early childhood education and care settings
Table D.8.4	Staff job satisfaction, by staff educational attainment
Table D.8.5	Staff job satisfaction, by setting type of management and profit status

Table D.8.6	Staff job satisfaction, by staff working hours
Table D.8.7	Relationship between feeling valued by society and staff job satisfaction and staff and setting characteristics
Table D.8.8	Relationship between barriers to structural quality: adequacy of staffing and staff and setting characteristics
Table D.8.9	Staff level of stress and impact on their well-being, by staff working hours
Table D.8.10	Staff level of stress and impact on their well-being, by staff role
Table D.8.11	Staff level of stress and impact on their well-being, by staff total work experience in early childhood education and care settings
Table D.8.12	Staff sources of stress in early childhood education and care settings, by staff role
Table D.8.13	Relationship between level of stress and its impact on staff well-being and staff and setting characteristics
Table D.8.14	Reasons to leave the early childhood education and care staff role, by staff role
Table D.8.15	Reasons to leave the early childhood education and care staff role, by staff age
Table D.8.16	Relationship between leaving the job to work in another sector and staff job satisfaction and staff and setting characteristics
Table D.8.17	Relationship between leaving the job due to physical health-related issues and staff job satisfaction and staff and setting characteristics
Table D.8.18	Relationship between leaving the job due to mental health-related issues and staff job satisfaction and staff and setting characteristics
Table D.8.19	Staff level of stress and impact on their well-being, by staff educational attainment
Table D.8.20	Relationship between level of stress and its impact on staff well-being and staff and setting characteristics
Table D.8.21	Staff level of stress and impact on their well-being, by type of management and profit status

StatLink  <https://stat.link/5ihtzf>

Table A D.9. Chapter 9: Looking forward: Preparedness for change in early childhood education and care

Table D.9.	
Table D.9.1	Collaboration and communication with external actors, by type of management and profit status
Table D.9.2	Leader professional development activities and training contents with a focus on collaboration
Table D.9.3	Staff professional development activities with a focus on collaboration
Table D.9.4	Staff engagement in collaborative practices in early childhood education and care settings, by staff role
Table D.9.5	Relationship between staff engagement in collaborative practices and setting leadership practices
Table D.9.6	External inspection and monitoring in early childhood education and care settings
Table D.9.7	External inspection and monitoring in early childhood education and care settings, by type of management and profit status
Table D.9.8	Policy and practice changes in early childhood education and care settings, by frequency and type of external monitoring
Table D.9.9	Staff education or training programmes for using digital resources to facilitate working with children
Table D.9.10	Staff sense of preparedness for using digital resources and tools to facilitate working with children
Table D.9.11	Relationship between staff self-efficacy and staff training on using digital resources to facilitate working with children
Table D.9.12	Relationship between staff professional development needs and staff training on using digital resources to facilitate working with children
Table D.9.13	Lack of digital resources in early childhood education and care settings, by type of management and profit status
Table D.9.14	Lack of digital resources in early childhood education and care settings, by setting geographical location
Table D.9.15	Lack of digital resources in early childhood education and care settings, by setting size
Table D.9.16	Staff views on spending priorities for digital resources, by staff professional development needs and self-efficacy in using digital resources
Table D.9.17	Staff and leader stress due to unexpected disruptions in early childhood education and care settings
Table D.9.18	Relationship between staff stress due to unexpected disruptions and characteristics of early childhood education and care staff and settings

StatLink  <https://stat.link/p4d82f>

Table A D.10. Leader responses: Statistical compendium from TALIS Starting Strong 2024

Table Leader.	
LEADER BACKGROUND INFORMATION	
Table Leader.1	Leader gender
Table Leader.2	Leader age
Table Leader.3	Leader highest educational attainment
Table Leader.4	Topics included in leader highest educational attainment
Table Leader.5	Leader work experience
Table Leader.6	Leader working hours in early childhood education and care settings
Table Leader.7-8	Leaders who work in more than one early childhood education and care setting
Table Leader.9	Leader professional development activities
Table Leader.10	Content of leader professional development activities
Table Leader.11	Leader professional development needs
Table Leader.12	Barriers to leader participation in professional development
ECEC SETTING BACKGROUND INFORMATION	
Table Leader.13	Geographic location of early childhood education and care settings
Table Leader.14	Neighbourhood around early childhood education and care settings
Table Leader.15	Physical location of early childhood education and care settings
Table Leader.16	Staff languages for communication with parents or guardians in early childhood education and care settings
Table Leader.17	Organisation of the work with children in early childhood education and care settings
Table Leader.18	Sources of funding in early childhood education and care settings
Table Leader.19	Type of early childhood education and care settings
Table Leader.20	Chain status of early childhood education and care settings
Table Leader.21	Profit status of early childhood education and care settings
Table Leader.22	Number of staff in early childhood education and care settings
Table Leader.23	Staff turnover in early childhood education and care settings
Table Leader.24	Staff absence in early childhood education and care settings
Table Leader.25	Children enrolled in early childhood education and care settings
Table Leader.26	Unmet demand in early childhood education and care settings
Table Leader.27	Characteristics of children in early childhood education and care settings
Table Leader.28	Physical space of early childhood education and care settings
Table Leader.29	Induction or orientation activities at early childhood education and care settings
ECEC SETTING PEDAGOGICAL AND ADMINISTRATIVE LEADERSHIP	
Table Leader.30	Responsibilities for tasks in early childhood education and care settings
Table Leader.31	Leader time spent on various tasks in early childhood education and care settings
Table Leader.32	Leader innovations and support for staff pedagogical learning in early childhood education and care settings
Table Leader.33	External engagement practices in early childhood education and care settings
Table Leader.34	External inspection and monitoring in early childhood education and care settings
Table Leader.35	Early childhood education and care setting's activities to facilitate children's transitions
Table Leader.36	Opportunities for parent engagement in early childhood education and care settings
Table Leader.37	Excursions and activities at early childhood education and care settings
Table Leader.38	Assessment frequency at early childhood education and care settings
Table Leader.39	Early childhood education and care settings' policies and practices in relation to diversity
Table Leader.40	Leader beliefs about preparing children for life in the future
SETTING WORK CLIMATE AND LEADER JOB SATISFACTION	
Table Leader.41	Distributed leadership in early childhood education and care settings
Table Leader.42	Barriers to quality provision in early childhood education and care settings
Table Leader.43	Leader job satisfaction
Table Leader.44	Leader level of stress and impact on their well-being

Table Leader.45	Leader sources of work stress in early childhood education and care settings

StatLink  <https://stat.link/tfgsm>

Table A D.11. Staff responses: Statistical compendium from TALIS Starting Strong 2024

Table Staff.	
STAFF BACKGROUND INFORMATION	
Table Staff.1	Staff gender
Table Staff.2	Staff age
Table Staff.3	Staff roles in early childhood education and care settings
Table Staff.4	Staff languages in early childhood education and care settings
Table Staff.5	Staff employment status in early childhood education and care settings
Table Staff.6	Staff working hours in early childhood education and care settings
Table Staff.7	Reasons for staff working part-time in early childhood education and care settings
Table Staff.8	Staff work experience
Table Staff.9-10	Staff who work in more than one early childhood education and care setting
Table Staff.11	Staff highest educational attainment
Table Staff.12-13	Education and training programmes that prepared staff to work with children
Table Staff.14	Content of staff initial education or training programmes
STAFF PROFESSIONAL DEVELOPMENT	
Table Staff.15	Staff professional development activities
Table Staff.16	Content of staff professional development activities
Table Staff.17	Staff perceived positive impact of professional development
Table Staff.18	Support for staff participation in professional development activities
Table Staff.19	Staff professional development needs
Table Staff.20	Barriers to staff participation in professional development
STAFF PROFESSIONAL PRACTICES & BELIEFS	
Table Staff.21	Concrete scenarios for staff practices in a small group activity
Table Staff.22	Concrete scenarios for staff practices with an individual child
Table Staff.23	Staff practices to promote awareness and acceptance of diversity in early childhood education and care settings
Table Staff.24	Staff self-efficacy
Table Staff.25	Staff beliefs about preparing children for life in the future
Table Staff.26	Staff spending priorities for the early childhood education and care sector
STAFF WORK WEEK	
Table Staff.27	Staff working hours in early childhood education and care settings
Table Staff.28	Hours spent on various work-related tasks in early childhood education and care settings
Table Staff.29	Staff practices to facilitate literacy development in early childhood education and care settings
Table Staff.30	Staff practices to facilitate numeracy development in early childhood education and care settings
Table Staff.31	Staff practices to facilitate pro-social behaviour in early childhood education and care settings
Table Staff.32	Staff practices to support play and exploration in early childhood education and care centers
Table Staff.33	Staff practices to facilitate emotional development in early childhood education and care settings
STAFF WORK WITH TARGET GROUP	
Table Staff.34	Number of staff in the target group
Table Staff.35	Number of children in the target group
Table Staff.36	Characteristics of children in the target group
Table Staff.37	Ages of children in the target group
Table Staff.38	Staff engagement in other tasks in the target group
Table Staff.39	Staff practices to support language development in the target group
Table Staff.40	Staff use of adaptive practices in the target group
Table Staff.41	Staff strategies to support classroom/playroom management in the target group

PRACTICES WITH OTHER ECEC STAFF AND PARENTS OR GUARDIANS

Table Staff.42	Staff collaborative practices
Table Staff.43	Staff practices to facilitate parent/guardian engagement in early childhood education and care settings

WORK CLIMATE AND JOB SATISFACTION

Table Staff.44	Staff satisfaction with early childhood education and care leadership
Table Staff.45	Staff job satisfaction
Table Staff.46	Staff level of stress and impact on their well-being
Table Staff.47	Staff sources of stress in early childhood education and care settings
Table Staff.48	Reasons to leave the early childhood education and care staff role

StatLink  <https://stat.link/fyjovc>

Annex E. List of TALIS Starting Strong 2024 contributors

TALIS Starting Strong is a collaborative effort, bringing together expertise from participating countries and subnational entities that share an interest in developing a survey project to inform their policies about the early childhood education and care (ECEC) workforce and quality of provision. This report is the product of collaboration and co-operation among many stakeholders and contributors.

In particular, the co-operation of staff and leaders in the participating ECEC settings has been crucial in ensuring the success of TALIS Starting Strong. Engagement with bodies representing teachers (Education International) and regular briefings and exchanges with the Trade Union Advisory Council (TUAC) at the OECD have been very important in the development and implementation of TALIS Starting Strong.

The Informal Group on TALIS Starting Strong, a sub-group of the TALIS Governing Board, has, in the context of OECD objectives, driven the development of the project and its policy objectives. This includes the objectives of the analysis and reports produced, the conceptual framework and the development of the TALIS Starting Strong questionnaires. The Informal Group on TALIS Starting Strong has also overseen the implementation of the survey and the preparation of this report.

Participating countries and subnational entities implemented TALIS Starting Strong at the national or subnational level at national project centres through, among others, national project managers (NPMs), national data managers (NDMs) and national sampling managers (NSMs), who were subject to rigorous technical and operational procedures. The NPMs played a crucial role in helping to secure the co-operation of ECEC settings, to oversee the national adaptation, translation and validation of the questionnaires, to manage the national data collection and processing and to verify the results from TALIS Starting Strong. The NDMs co-ordinated data processing at the national or subnational level and liaised in the cleaning of the data. The NSMs were responsible for implementing TALIS Starting Strong, respecting sampling procedures and other rigorous technical and operational procedures. In addition to the participating countries and subnational entities, the United States contributed to the development of the questionnaires.

A Questionnaire Expert Group (QEG) was established to translate the policy priorities into questionnaires to address the policy and analytical questions that had been agreed by the Informal Group on TALIS Starting Strong. A Technical Advisory Group (TAG) was assembled to advise during the decision-making process for technical or analytical issues. A group of subject-matter experts and analysts were also critical in the analytical phase and drafting of the initial reports.

The co-ordination and management of implementation at the international level was the responsibility of the appointed contractors, the International Association for the Evaluation of Educational Achievement (IEA), its consortium members, cApStAn and RAND Europe AISBL. The TALIS Starting Strong Consortium included staff from the IEA offices in Amsterdam and Hamburg, cApStAn and RAND Europe AISBL.

IEA Hamburg was responsible for the overall survey planning, survey administration, the international data management, item analyses and scaling for the TALIS core. IEA Amsterdam was responsible for overseeing the verification of the translation and for the implementation of the international quality control programme. The sampling unit at the IEA Hamburg, developed the sampling plan, advised countries and subnational entities on its application, calculated the sampling weights and advised on the calculation of

sampling errors. RAND Europe AISBL managed the development of the survey instruments and conceptual framework. cApStAn linguistic quality control, Brussels Belgium, was responsible for organising and implementing the translation verification process for all administered languages.

The OECD Secretariat had overall responsibility for managing the project, monitoring its implementation on a day-to-day basis and serving as the secretariat of the Informal Group on TALIS Starting Strong.

List of TALIS Starting Strong 2024 Contributors

Chair of the Informal Group on TALIS Starting Strong: Bernhard Kalicki

Canada

Fadi Balesh
 Nathalie Beaulieu
 Marie-Eve Chouinard
 Marie-France Chouinard
 Lucia Culen
 Kristen Dawson
 Nicolas Desrivieres
 Chany Gauthier
 Mélanie Gauthier
 Valerie Harasemchuk
 Tamara Knighton (NPM)
 Sophie Letendre
 Chloe Mcisaac
 Netty Vanessa Mfingoulou
 Marie-Hélène Poisson
 Lindsay Varkey
 Lindsay Webb

Chile

Josefa Araya (NPM)
 Rodrigo Berrios
 Maria Francisca Braun Bustamante
 Eliana Chamizo Álvarez
 Paula Guardia
 Javier Guevara

Bárbara Marchant

Vanessa Orrego

Maria Francisca Rodriguez Caceres

Colombia

Angie Abello

Camilo Apache

Juan Daniel Barragán

Elizabeth Blandon Bermudez

Alejandro Chaparro

Angie Contreras Sanabria

Ricardo Duplat

Kelly García

Cristian González

Javier Juyar Rojas

Eduardo Malagon

Gustavo Andrés Monsalve (NPM)

Cristian Montaña Rincon

Alejandra Neira

Ana Maria Peñuela

Mónica Roldan

Ana Salazar Londoño

Brian Felipe Sarmiento

José Julian Segura

Luisa Fernanda Trujillo Bernal

Michael Vargas

Denmark

Lars Granhøj

Torben Hovmark (NPM)

Signe Illum Lindegren Pedersen

European Commission

Miguel Angel Alvarez Espinosa

Daniele Vidoni

Finland

Kirsi Alila

Eija Puhakka (co-NPM)

Matti Taajamo (NPM)

Heidi Usmi

Flemish Community of Belgium

Katrijn Ballet

Teun Pauwels

Filip Van Droogenbroeck (NPM)

Christele Van Nieuwenhuyzen

Diederik Vancoppenolle

Marjolein Wilke

Germany

Samuel Bader

Fabienne Becker-Stoll

Kristina Geiger

Claudia Hachul

Bernhard Kalicki

Tijana Lujic

Corinna Malik

Birgit Riedel

Daniel Turani (NPM)

Tobias Wandrei

Ireland

Ailbhe Booth

Bridget Hearne (NPM)

Toby Wolfe

Israel

Yoav Bergner

Shahar Dangur-Levy

Francine Essa (NPM)

Noa Schori Eyal (former NPM)

Georgette Hilu

Japan

Takashi Yagisawa (NPM)

Akira Horoiwa

Norika Horikoshi

Saeko Nishio

Ryotaro Suzuki

Morocco

Hicham Ait Mansour

Fatima Berahou (NPM)

Rahma Bourqia

New Zealand

Barclay Anstiss

Hannah Bennett

Rachel Borthwick (NPM)

Siobhan Murray

Kim Nathan

Norway

Cay Gjerustad (NPM)

Ida Large

Maria Orvik

Annette Qvam

Tove Slinde

Jan Eivind Sodeland

Spain

Juan Carchano (NPM)

Verónica Díez Girado (co-NPM)

Javier Garcia Crespo

Carmen Tovar Sanchez

Sweden

Maria Axelsson

Per Magnusson
Christina Sonmark
Cecilia Stenman (NPM)

Türkiye

Ilker Damlar
Burcu Ertugrul
Irem Özbay
Ozden Pinar Irmak
Mustafa Saygin
Ercan Yildiz (NPM)

United States

Jodi Jacobson Chernoff
Mary Coleman

OECD Secretariat

Core team

Stéphanie Jamet
Elizabeth Shuey
Gemma Coleman
Esther Ferreira dos Santos
Carlos Gonzalez-Sancho
Sarah Grant
Pinar Kolancali
Anna Machnio
Andreea Minea-Pic
Judit Pál
Miguel Angel Quintero López
Mauricio Salazar-Lozada

Other secretariat support

Strategic development

Yuri Belfali (Head of the Early Childhood and Schools Division)
Andreas Schleicher (OECD Director for Education and Skills)

Editorial and communications support

Jennifer Allain (Editor, external)

Joanne Caddy (Communications Manager)

Duncan Crawford (Editor)

Kevin Gillespie (Event and Communications Co-ordinator)

Rachel Linden (report production)

Sasha Ramirez-Hughes (former Communications Manager)

Della Shin (Communications Content Designer)

Anna Wahlgren (Social Media and Digital Campaigns Officer)

TALIS Starting Strong expert groups***TALIS Starting Strong 2024 Questionnaire Expert Group (ECEC QEG)***

Julie Belanger (Better Purpose)

Alejandra Cortazar (Centro de Estudios Primera Infancia)

Rahel Dreyer (Alice Salomon University of Applied Sciences)

Mine Göl-Güven (Bogazici University)

Lynn Karoly (RAND)

Maelis Karlsson Lohmander (University of Gothenburg)

Thomas Moser (The University of Stavanger)

Abbie Raikes (University of Nebraska Medical Center)

Yumi Yodogawa (Chiba University)

Sampling Referee

- Jean Dumais (Previously Statistics Canada, Gatineau, Canada)

Translation Referee

- Michèle Ernst Stähli (Swiss Centre of Expertise in the Social Sciences, Switzerland)

Technical Advisory Group (TAG)

Chair: Tim Kennel (US Census Bureau)

Mick Couper (University of Michigan)

Paul Leseman (University of Utrecht)

Bart Meuleman (KU Leuven)

Christian Monseur (University of Liège)

TALIS Starting Strong Consortium

IEA Hamburg (Hamburg, Germany) – International Study Centre

Management and direction

Steffen Knoll (Study Director)

Anja Waschk (Study Director)

Ralph Carstens (Senior Strategic Advisor, Lead Conceptual Development)

Eleonora Kolomiets (Study Co-ordinator, 2022 onwards)

Mira Bocti (Study Co-ordinator, 2023 to 2024)

Megan Sim (Study Co-ordinator, 2021 to 2023)

Huyen Thi Thu Nguyen (Study Co-ordinator, 2021 to 2023)

Xiao Xiao (Study Co-ordinator, 2021)

Data management, adaptation, and layout verification

Adriana Viteri (Lead Data Manager 2022 to 2025)

Darrell Gwaltney (Data Manager, 2021 to 2022, 2025)

Mark Cockle (Data Manager 2023)

Kamil Kowolik (Data Manager 2024 onwards)

Abdullah Al-Azzawi (Research Analyst, 2021 to 2023)

Alena Becker (Senior Research Analyst, 2020 to 2022)

Clara Beyer (Research Analyst)

Viktoria Boehm (Research Analyst)

Renato Coppi (Research Analyst)

Tim Daniel (Research Analyst)

Osman Deger (Student Assistant, 2022 to 2024)

Ikram El Jabiry (Student Assistant)

Isbat Hasnat (Research Analyst)

Wolfram Jarchow (Research Analyst)

Svenja Kalmbach (Research Analyst, 2021 to 2024)

Inderawes Khalil (Research Analyst, 2021 to 2023)

Juliane Kobelt (Research Analyst)

Adam Kotb (Student Assistant, 2023 to 2024)

Hannah Kowolik (Research Analyst)

Chen-Ho Lee (Research Analyst)

Jurij Lenar (Research Analyst)

Widianto Persadha (Research Analyst)

Valentina Rivera Toloza (Research Analyst, 2021 to 2023)

Heiko Sibberns (Senior Research Advisor)

Xiao Sui (Research Analyst)

Daniel Ugurel (Research Analyst)

Duygu Uyar (Research Analyst)

Vanisa Vongphanakhone (Research Analyst)

Hajar Zare (Student Assistant, 2022 to 2024)

Sampling

Karsten Penon (Sampling Manager)

Diego Cortes (Senior Research Analyst)

Isbat Ibn Hasnat (Research Analyst, 2024)

Ahmad Khalil (Research Analyst, 2023 onwards)

Rodrigo Leyton (Research Analyst, 2022 onwards)

Sabine Meinck (Co-head Research and Analysis Unit)

Maximiliano Romero (Research Analyst, 2021 to 2024)

Duygu Savaşçı-Smith (Research Analyst)

Refilwe Setimela (Research Analyst, 2024 onwards)

Hannah Smith (Research Analyst, 2020 to 2021)

Felix Süttmann (Research Analyst, 2021 to 2022)

Sabine Tieck (Senior Research Analyst, Sampling Team Lead)

Pablo Torres Iribarra (Research Analyst, 2021 to 2024)

Scaling and analysis

Mojca Rožman (Senior Research Analyst, Team Lead, 2022 onwards)

Agnes Stancel-Piątak (Senior Research Analyst, Team Lead, 2020 to 2022)

Purya Baghaei Moghadam (Senior Research Analyst)

Falk Brese (Senior Research Analyst)

Minge Chen (Research Analyst)

Andres Christiansen (Senior Research Analyst)

Alec Kennedy (Senior Research Analyst)

Yuan-Ling Liaw (Senior Research Analyst)

Ana Maria Mejia-Rodríguez (Senior Research Analyst)

Maximiliano Romero (Research Analyst, 2024 onwards)

Rolf Strietholt (Co-head Research and Analysis Unit)

Andres Ignacio Strello Toledo (Senior Research Analyst)

Pablo Torres Iribarra (Research Analyst, 2024 onwards)

Software development (IEA StudyExpert)

Guido Martin (Lead)

Sascha da Silva Burger (Quality Assurance)

Sven Flachsbarth (Quality Assurance, 2022 to 2023)

Christian Harries (Developer)

André Schäfer (Quality Assurance)

Katharina Sedelmayer (Developer)

Harpreet Singh (Developer)

Daniela Specks (Quality Assurance)

Sheung Kong Tai (Developer)

Sujith Thulaseedharan (Quality Assurance)

Software development (IEA DME, IEA DPE, IEA WinW3S, IEA IDB Analyzer)

Yasin Afana (Research Analyst)

Mohamadreza Atrian (Developer)

Limiao Duan (Developer)

Marwan Elkholy (Student Assistant, 2022 to 2023)

Maike Junod (Developer)

Marius Kaltenbach (Developer)

Delnaz Mohebigilani (Developer)

Tam Nguyen (Developer)

Meng Xue (Senior Advisor, Unit Head)

Contracts, events, and administration

Mira Bockti (Event Co-ordinator, 2024 onwards)

Connie Crossman (Unit Co-ordinator)

Aisha Elsayed (SharePoint Administrator)

Eva Feron (Unit Head International Studies)

Christian Groth (Finance Director)

Juliane Hencke (Director)

Laiza Souza (Event Co-ordinator, 2021 to 2024)

Viola Wittmann (Contracts)

Bettina Wietzorek (SharePoint Administrator)

IEA Amsterdam (Amsterdam, the Netherlands)

Betina Borisova (Data Protection Officer)

Jan-Peter Broek (Financial Director, 2023 onwards)

Roel Burgers (Financial Director, 2021 to 2023)

David Ebbs (Senior Research Officer, Lead Translation Verification)

Kateřina Hartmanov (Research Officer, 2021 to 2024)

Florence Mitchell-Green (Junior Research Officer, 2024 onwards)

Marta Moreno Hidalgo (Research Officer)

Lauren Musu (Head Translation Verification and International Quality Control)

Tahira Qadri (Research Officer)

Anna Wikstrm (Junior Research Officer, 2023 to 2024)

cApStAn Linguistic Quality Control (Brussels, Belgium)

Josiane Tyburn (Lead Project Manager)

Steve Dept (Founding Partner)

Elica Krajeva (Senior Project Manager, Cross-cultural Survey Translation and Adaptation)

Roberta Lizzi (Senior Project Manager, External Human Resources Director)

Adrien Mathot (Translation Technologist)

Manuel Souto Pico (Lead Translation Technologist)

Laura Wayrynen (Operations Director)

RAND Europe (Cambridge, United Kingdom)

Merrilyn Groom (Research Analyst, Project Lead, 2022-2024, 2025 onwards)

Miriam Broeks (Research Analyst, Project Lead, 2021-2022)

Miguel Subosa (Research Analyst, Project Lead, 2024-2025)

Elena Rosa Brown (Senior Researcher)

Fin Oades (Research Assistant)

Trade Union Advisory Committee (TUAC)

Sissel Havre

Martin Henry

Jon Kaurel

Gina Pancorbo

Results from TALIS Starting Strong 2024

Strengthening Early Childhood Education and Care

Early childhood education and care (ECEC) has the potential to address a range of goals, yet delivering on the potential of ECEC requires a workforce that is equipped and motivated to meet the unique demands of facilitating young children's development, learning and well-being. The OECD Starting Strong Teaching and Learning International Survey (TALIS Starting Strong) focuses on the ECEC workforce. In 2024, ECEC staff and leaders in 17 countries and subnational entities shared insights into a wide range of topics, including their working conditions, professional development opportunities and their work with young children.

This report presents the results of the survey, looking at the activities and supports for children and their families through ECEC, as well as the aspects of working in ECEC that staff appreciate, their opportunities for career progression and sources of work-related stress. The governance, oversight and structure of job opportunities in the sector are also considered. Taking a forward-looking approach, the TALIS Starting Strong 2024 data are used to inform strategies for strengthening ECEC systems in the face of shifting demands on the sector and short-term crises, better equipping these systems to realise the benefits of ECEC for the future.



PRINT ISBN 978-92-64-95113-6
PDF ISBN 978-92-64-50319-9

