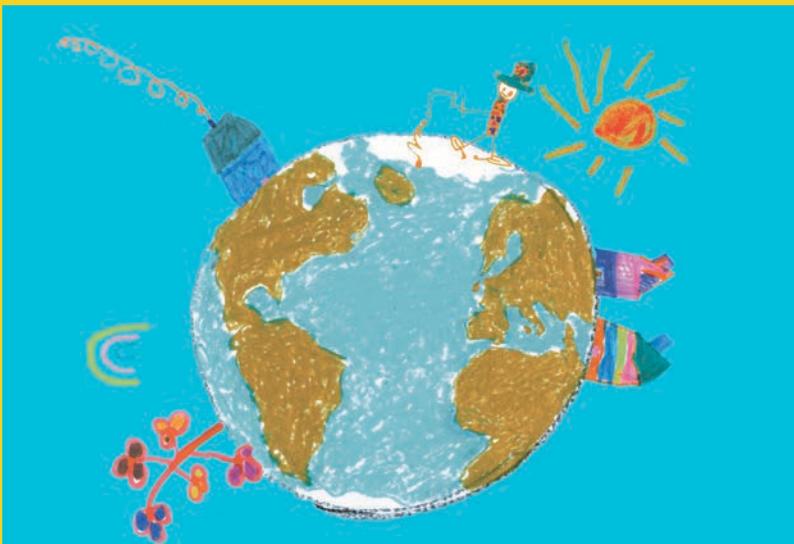




Starting Strong V

TRANSITIONS FROM EARLY CHILDHOOD EDUCATION
AND CARE TO PRIMARY EDUCATION



Starting Strong V

TRANSITIONS FROM EARLY CHILDHOOD EDUCATION AND CARE TO PRIMARY EDUCATION



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 OECD member countries.

This document and any 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.

Please cite this publication as:

OECD (2017), *Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education*,
OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264276253-en>.

ISBN 978-92-64-27623-9 (print)
ISBN 978-92-64-27625-3 (PDF)

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.

Photo credits: © Monkey Business Images/Shutterstock.com and Pressmaster/Shutterstock.com

Corrigenda to OECD publications may be found on line at: www.oecd.org/about/publishing/corrigenda.htm.

© OECD (2017)

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of the source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

Foreword

The first years of life lay the foundations for an individual's future skills development and learning. As previous *Starting Strong* reports have shown, investments in high-quality early childhood education and care (ECEC) pay dividends in terms of children's long-term learning and development. Many OECD countries recognise this, and have increased public spending on ECEC in recent years. However, a growing body of research suggests that the benefits can disappear during the first years of primary school if the transitions between ECEC and primary schooling are not well-prepared, or if continuity in quality is not ensured in primary education.

For many children, the transition from the last period of early childhood education to the start of primary school is their first experience of a big cultural change – in the people surrounding them, the ways in which they interact, their number of peers, the types of activities they are engaged in, and their physical surroundings. A successful experience at this stage is likely to influence whether or not they can develop their full potential, and their ability to cope with future transitions.

The political and social attention on transitions in early learning has increased over the past decade in many countries. This fifth report in the OECD's *Starting Strong* series aims to build a consolidated international knowledge base on effective strategies and policies to ensure continuity in children's learning and well-being environments between ECEC and primary education. It offers a state-of-the-art summary of the latest research and thinking on transitions, and draws on surveys of OECD and partner countries to establish where countries are in ensuring coherence in transition governance, professional continuity, curriculum and pedagogical continuity, and developmental continuity. The report concludes by drawing out six key cross-cutting policy pointers to guide and inspire policy makers aiming to ensure successful transitions in their countries or jurisdictions.

The publication was drafted by the OECD Early Childhood Education and Care team in co-operation with external consultants. The lead authors of the publication are: Miho Taguma (Chapters 1 and 6), Maria Huerta (Chapters 1 and 5), Arno Engel (Chapter 3) of the Directorate for Education and Skills and external consultants Ineke Litjens (Chapter 2) and Jenni Salminen (Chapter 4), with contributions by Victoria Liberatore (Chapter 3), and with peer reviews and support among the authors.

Research assistance was provided by Anaïs Loizillon. Project support was provided by Mernie Graziotin. Other help in finalising this publication has been provided by Éric Charbonnier, Clara Barata, Guillaume Bousquey, Meral Gedik, Rachel Linden, Sophie Limoges, Fiona Hitchcliffe, Anne-Lise Prigent and Margaret Simmons. Members of the OECD Network on Early Childhood Education and Care provided country information and data, and helped guide the development of this publication (see Annex B for a list of Network members who have contributed).

Coordination was provided by Maria Huerta with overall guidance and support by Éric Charbonnier and Miho Taguma (project leader). Final review was provided by Andreas Schleicher, Montserrat Gomendio, Yuri Belfali, Noémie Le Donné, Pablo Fraser and Olivier Thévenon.

International experts helped to review the chapters or glossary and provided valuable comments. Sandra Antulić (Croatia), Martine Broekhuizen (The Netherlands), Marion Burns (Scotland, United Kingdom), Alejandra Cortazar (Chile), Ludovica Gambaro (Germany), Kristoffer Halvorsrud (Norway), Hilde Higsnes (Norway), Bente Jensen (Denmark), Sharon Lynn Kagan (United States), Lynn Karoly (United States), Leslie Kopf-Johnson (Canada), Francisca Morales (Chile), Thomas Moser (Norway), Eunhye Park (Korea), Liz Paterson (Scotland, United Kingdom), Megan Sim (United Kingdom), Agnes Stancel-Piątak (Germany), Cristina Stringher (Italy), Fons van de Vijver (The Netherlands), Michel Vandenbroeck (Belgium), Jiaxiong Zhu (China) commented on the drafts, which were finalised by the lead authors.

Information on the OECD Network on Early Childhood Education and Care is available at:
www.oecd.org/edu/earlychildhood.

Table of contents

Foreword	3
List of abbreviations	11
Executive summary.....	13
Chapter 1. Overview: Towards smooth transitions from early childhood education and care to primary school.....	15
Introduction.....	17
What are transitions and why do they matter?	18
What does the literature say about the ingredients of successful transitions?	21
What are OECD countries doing to improve transitions?	22
Notes.....	35
References.....	35
Chapter 2. The organisation and governance of transitions from early childhood education and care to primary school	39
Introduction.....	41
What are the goals and objectives of transitions from early childhood education and care to primary school?	42
What are the trends in organising and governing transition systems?	43
How do countries organise early childhood education and care transitions?	48
How do countries govern transitions?	56
What are the common organisational and governance challenges and how are they overcome?	64
Policy development pointers.....	70
Annex 2.A. Detailed country-by-country responses.....	72
Notes.....	79
References.....	80
Chapter 3. Professional continuity in transitions from early childhood education and care to primary school.....	85
Introduction.....	87
What does the literature tell us about the importance of professional continuity?	88
To what extent are countries ensuring professional continuity?	96
What are the common professional continuity challenges and how are they overcome?	114
What policy development pointers arise from this research?	123
Annex 3.A Detailed country-by-country responses.....	126
Notes.....	133
References.....	134
Chapter 4. Pedagogical continuity in transitions from early childhood education and care to primary school.....	147
Introduction.....	149
What does the literature tell us about pedagogical continuity during transition from early childhood education and care to primary school?	150
To what extent are countries ensuring pedagogical continuity?.....	156
What are the common pedagogical continuity challenges and how are they overcome?	175

TABLE OF CONTENTS

What policy development pointers arise from this research?	181
Annex 4.A. Detailed country-by-country responses.....	183
Notes.....	194
References	195
Chapter 5. Developmental continuity in transitions from early childhood education and care to primary school.....	203
Introduction.....	205
What does the literature tell us about developmental continuity during transition from ECEC to primary school?	207
To what extent are countries ensuring developmental continuity?	214
What are the common developmental continuity challenges and how are they overcome?	232
What policy development pointers arise from this research?	240
Annex 5.A. Detailed country-by-country responses.....	242
Notes.....	242
References.....	243
Chapter 6. Policy pointers to improve transitions from early childhood education and care to primary school.....	253
Introduction.....	254
Focus on making schools ready for children, not children ready for school.....	254
Dispel some common myths and misconceptions surrounding transitions	256
Overcome structural roadblocks to co-operation and continuity.....	259
Encourage local leadership, backed by a clear national policy framework	260
Mainstream transition into existing equity measures.....	262
Support transition research and monitoring to improve policy	264
Notes	266
References	267
Annex A. Methodology	271
Annex B. List of network member contributors to Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education	273
Glossary of terms	277
Note	292
References.....	292

Figures

Figure 1.1	Half of all children experience two transitions before they reach primary school (2016)	23
Figure 1.2	Most pre-primary teachers in the OECD spend more hours in direct contact with children than primary teachers (2014).....	25
Figure 1.3	Jurisdictions are broadening their pre-primary curricula to include emerging learning areas (2011 and 2015).....	27
Figure 1.4	Most jurisdictions offer transition practices to prepare children for their transit to school (2016).....	30
Figure 2.1	Pre-primary enrolment rates are still lower than for primary education (2014).....	49
Figure 2.2	The share of children participating in early childhood education and care is increasing (2009 and 2014).....	50

Figure 2.3	The majority of children experience at least two transitions before primary school (2016)	51
Figure 2.4	More than half the countries offer a separate year or class/group the year before compulsory primary school (2016)	52
Figure 2.5	Retention rates in the first year of primary school are low (2014)	55
Figure 2.6	National government is involved in guiding transitions in three-quarters of participating jurisdictions (2016).....	56
Figure 2.7	A variety of agencies may be involved in transitions (2016).....	58
Figure 2.8	Expenditure on primary education is consistently higher than on pre-primary education (2013)	59
Figure 2.9	The majority of countries spent more per child for primary education (2013).....	60
Figure 2.10	There are large variations in average annual expenditure per child as a share of GDP for primary education and pre-primary education (2013).....	61
Figure 2.11	Countries vary in the levels at which they monitor transitions (2016)	62
Figure 2.12	Parent surveys are the most commonly used monitoring instruments (2016)	63
Figure 3.1	In almost all countries salary costs of primary teachers are higher than those of pre-primary teachers (2014)	98
Figure 3.2	Most pre-primary teachers in the OECD spend more hours in direct contact with children than primary teachers (2014).....	99
Figure 3.3	Pre-primary teachers tend to be younger than primary teachers across the OECD (2014)	100
Figure 3.4	Countries are increasingly aligned in their salaries and years of education for pre-primary and primary teachers (2013).....	102
Figure 3.5	The content of pre-service training is well-aligned across pre-primary and primary, 2013.....	103
Figure 3.6	Training on transitions during pre-service education is common (2014)	103
Figure 3.7	Professional development requirements vary little for pre-primary and primary teachers (2014)	105
Figure 3.8	The majority of countries studied include transitions in professional development training (2014).....	105
Figure 3.9	The rapid growth in qualified and registered early childhood teachers in New Zealand, 2004-2013	117
Figure 4.1	In most jurisdictions ECEC and primary curricula are either aligned or integrated (2016)	160
Figure 4.2	Values and principles are commonly included in both ECEC and primary curricula (2016)	163
Figure 4.3	The main core content areas are aligned in both ECEC and primary schools in most jurisdictions (2016)	167
Figure 4.4	Jurisdictions are broadening their pre-primary curricula to include emerging learning areas (2011 and 2015)	169
Figure 4.5	In half the jurisdictions the hours spent in early childhood education and care and primary education are similar (2016)	171
Figure 4.6	In most jurisdictions, primary school staff-child ratios are higher than in early childhood education and care (2016)	173
Figure 4.7	Group sizes in primary school and the last year of early childhood education and care vary little in most jurisdictions studied (2016)	174
Figure 5.1	Open house days and parent information meetings are the most common method for preparing children for transitions	215

Figure 5.2	Most countries have multiple activities to prepare children and parents for primary school.....	217
Figure 5.3	Staff-parent transition collaboration is more common in ECEC settings than in primary school.....	222
Figure 5.4	In most jurisdictions it is common practice to share child development information....	226
Figure 6.1	Multiple factors and connections are at play in transitions	258

Tables

Table 1.1	Governance and organisational challenges and policy strategies	23
Table 1.2	Challenges and strategies in strengthening professional continuity.....	26
Table 1.3	Challenges and strategies in strengthening pedagogical continuity.....	28
Table 1.4	Challenges and strategies in strengthening collaborations to enhance developmental continuity	30
Table 1.5	An overview of early childhood education and care and primary school alignment indicators for smooth transitions.....	33
Table 2.5	Challenges and strategies in strengthening transitions	64
Table 2.1	Common organisation of regular ECEC and primary education, by jurisdiction	73
Table 2.2	In most participating jurisdictions, ECEC and schools are physically integrated (2016).....	76
Table 2.3	Most, but not all, children start both compulsory and primary education at the age of six (2016)	77
Table 2.4	Level of authority involved in transition policies, by country (2016)	78
Table 3.1	In most countries both pre-primary and primary pedagogical staff require a similar level of qualifications (2013).....	101
Table 3.2	Challenges and strategies in strengthening professional continuity.....	114
Table 3.A.1	Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015).....	127
Table 4.1	Comparison across jurisdictions of curriculum frameworks in place for early childhood education and care (ISCED 01 and ISCED 02) and for primary education (ISCED 1).....	157
Table 4.2	Challenges and strategies in strengthening pedagogical continuity.....	175
Table 4.A.1	Alignment between early childhood education and care (last year of ECEC in particular) and primary school curriculum	184
Table 4.A.6	The curricula in place in ECEC and primary education across 63 jurisdictions	185
Table 4.A.7	List of the national curricular documents and frameworks	192
Table 5.1	Is the importance of children's views mentioned in education acts and curricula?	218
Table 5.2	Is parental involvement in transitions mentioned in education acts and curricula?....	220
Table 5.3	Is collaboration between parents and staff on transitions mentioned in education acts and curricula?.....	220
Table 5.4	Is collaboration between ECEC and primary school mentioned in education acts and curricula?	225
Table 5.5	Is collaboration with community services mentioned in education acts and curricula?	229
Table 5.6	Challenges and strategies in ensuring developmental continuity	232
Table A.1	List of countries and jurisdictions completing transitions questionnaire	272

Boxes

Box 1.1	Key definitions: Early childhood transitions	18
Box 1.2	School readiness and schoolification	20
Box 2.1	Key definitions	42
Box 2.2	Case study: The issue of first graders in primary school in Japan	44
Box 2.3	Case study: The integration of transitions into Finland's curricula	45
Box 2.4	Case studies: Local autonomy in governing transitions in Denmark, Norway and Sweden	57
Box 2.5	Case study: Monitoring transitions in Sweden	63
Box 2.6	Case study: Developing a national transition strategy in Austria	65
Box 3.1	Key definitions	88
Box 3.2	Why stability matters for transitions	93
Box 3.3	Case study: Decentralised transitions training in Germany	104
Box 3.4	Case study: Professional development for childminders in Wales (United Kingdom)	106
Box 3.5	Case study: Guidelines to support staff and inform transition practices	109
Box 3.6	Case study: Co-operation for human resources development and support in Austria	113
Box 3.7	Case study: Setting quantitative targets to boost qualifications of ECEC staff in New Zealand	117
Box 3.8	Case study: Teaching transitions through inter-disciplinary training in Germany	118
Box 3.9	Case study: Listening to staff and teacher views on professional continuity in Slovenia	119
Box 3.10	Supporting reciprocal visits and professional learning to facilitate transitions to school in the State of Victoria, Australia	120
Box 3.11	Case study: Insights from Italy's challenges and strategies around professional continuity	124
Box 4.1	Key definitions	150
Box 4.2	Case study: Curricular integration between the last year of ECEC and the first year of primary school: examples from Wales (United Kingdom) and Sweden	161
Box 4.3	Case study: Explicit curricular alignment in Slovenia	162
Box 4.4	Case study: Building curricular continuity in Austria in the absence of aligned or integrated curricula	162
Box 4.5	Case study: Curriculum for Excellence (CfE) and early level transitions in Scotland (United Kingdom)	178
Box 5.1	Key definitions	206
Box 5.2	Special support for children's language development: Examples from Germany and the Netherlands	216
Box 5.3	Case study: Supporting the transition of children with special needs in Canada	223
Box 5.4	Case study: Sharing child development information as a tool to improve communication: examples from Australia and Ireland	227
Box 5.5	Case study: Collaborative platforms of best practice in Austria	228
Box 5.6	Case study: Parents' transition support materials in Wales (United Kingdom)	234

Follow OECD Publications on:



http://twitter.com/OECD_Pubs



<http://www.facebook.com/OECDPublications>



<http://www.linkedin.com/groups/OECD-Publications-4645871>



<http://www.youtube.com/oecdlibrary>



<http://www.oecd.org/oecddirect/>

This book has...

StatLink

A service that delivers Excel® files from the printed page!

Look for the StatLinks at the bottom of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the <http://dx.doi.org> prefix, or click on the link from the e-book edition.

List of abbreviations

CfE	Curriculum for Excellence (Scotland, United Kingdom before bracket)
DLF	Danmarks Lærerforening (The Danish Union of Teachers, Denmark)
ECEC	Early childhood education and care
ECERS	Early Childhood Environment Rating Scale (assessment instrument)
ECERS-R	Early Childhood Environment Rating Scale, Revised (assessment instrument)
EPPE	Effective Provision of Pre-school Education study
HLE	Home Learning Environment
EELP	Effective Early Learning Project (United Kingdom)
EYFS	Early Years Foundation Stage (England, United Kingdom)
EYPS	Early Years Professional Status (England, United Kingdom)
FaCE	Family and Community Engagement (guidance to engage families in Wales)
FEP PE	Framework Education Programme for Preschool Education (defines pedagogical aspects in national ECEC settings, Czech Republic)
GGD	Gemeentelijke Gezondheidsdienst (municipal health service, Netherlands)
GUS	Growing Up in Scotland (longitudinal research study in Scotland, United Kingdom)
HHS	US Department of Health and Human Services
HIPPY	Home Instruction for Parents of Pre-school Youngsters (an international programme)
ICT	Information and communication technology
ILO	International Labour Organization
INVALSI	Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione (Italian National Institute for the Evaluation of the System of Education and Training)
ISCED	International Standard Classification of Education
JUNJI	Junta Nacional de Jardines Infantiles (National Board of Kindergartens, Chile)
KES / KES-R	Kindergarten-Einschätz-Skala (Kindergarten Evaluation Scale, German adaptation of the ECERS)

LIST OF ABBREVIATIONS

KiFöG	Kinderförderungsgesetz (Child Support Law, Germany)
KRIPS-R	Krippen-Skala (German adaption of ITERS-R)
Lpfö 98	Läroplan för förskolan (Curriculum for preschool, Sweden)
Lgr 11	Läroplan för grundskolan (Curriculum for the compulsory school, the preschool class and the recreation centre, Sweden)
NAE	Skolverket (National Agency for Educators, Sweden)
NAECS-SDE	National Association of Early Childhood Specialists in State Departments of Education (United States)
NAEYC	National Association for the Education of Young Children (United States)
NCCA	National Council for Curriculum and Assessment (Ireland)
NCKO	Nederlands Consortium Kinderopvang Onderzoek (Dutch Consortium for Child Care)
NGO	Non-government organisation
OECD	Organisation for Economic Co-operation and Development
Ofsted	Office for Standards in Education, Children's Services and Skills (national inspection agency for early years settings, United Kingdom)
PISA	Programme for International Student Assessment (OECD)
PPT	Public health centre and the child welfare service (Norway)
TALIS	Teaching and Learning International Survey (United States)
STAR	Steps to Achieving Resilience programme (United States)
DISS	Deployment and Impact of Support Staff (United Kingdom)
NSA	Numeracy Support Assistants programme (United States)
ELEY	Effective Leadership in Early Years (United Kingdom)
SES	Socio-economic status
vve	Voor- en vroegschoolse educaties (before school and early school education programme, the Netherlands)

Executive summary

The first years of life lay the foundations for future skills development and learning. The transition from early childhood education to primary school is a big step for all children. A supportive and stress-free experience at this stage is likely to influence whether or not they can develop to their full potential at school, academically and socially. Investments in high quality early childhood education and care (ECEC) and smooth transitions between the various stages of early education, are key for children's long-term learning and development. Quality transitions that are well-prepared and child-centred, managed by trained staff collaborating with one another, and guided by an appropriate and aligned curriculum, enhance the likelihood that the positive impacts of early learning and care will last through primary school and beyond.

There is currently little policy knowledge on how OECD and partner countries design, implement, manage, and monitor transitions. Filling these gaps is important to ensure that early years' policies provide continuity of the ECEC benefits into primary education; promote a strong start in primary school; and foster a more equitable early education system. To build a solid knowledge base on this topic, the OECD has taken stock of transition policies and practices across 30 OECD and partner countries. This report presents the findings and suggests that countries have introduced a wide range of strategies, policies and practices to ensure continuity in transitions. This report categorises these into four interdependent areas and concludes with policy pointers:

- 1) Organisation and governance (Chapter 2)
- 2) Professional continuity (Chapter 3)
- 3) Pedagogical continuity (Chapter 4)
- 4) Developmental continuity (Chapter 5)
- 5) Policy pointers (Chapter 6)

Organisation and Governance. With more children in ECEC than ever, increasing numbers of young children experience not only a transition from home to school but also a transition between ECEC and school. On a daily basis, children may also transition between either a pre-primary education setting or primary school and an after-school centre. In line with these developments, greater attention is being given to transitions across countries. Policy documents are placing a stronger emphasis on the need for smooth transitions and call on local authorities, ECEC settings and schools to implement appropriate policies and practices. Responsibilities for ECEC are increasingly integrated within the ministry of education, which facilitates collaboration between education levels and can strengthen coherence. Yet, challenges remain: Lack of coherence across regions in transition approaches; difficulty in engaging all actors; weak collaboration among stakeholders; and inequity in transitions.

Professional Continuity. In most, but not all countries, preschool and primary teachers commonly have access to training on transitions in the countries participating in this study, and qualification levels required for preschool and primary teachers are also being brought into line. By levelling the professional playing field across settings, communication and respect can be improved. Pre-primary teachers still often have less working time than their primary school peers for tasks other than being in contact with children. Remaining key challenges include: discrepancies between status and perspectives of ECEC and primary school teachers; lack of relevant training and support on transitions at both levels; and structural hurdles to co-operation and co-ordination.

Curriculum and Pedagogical Continuity. Pedagogy is increasingly becoming more aligned between pre-primary and primary levels. Curricula for ECEC and primary school are either aligned or fully integrated in three-quarters of participating jurisdictions, ensuring that instructional techniques and strategies do not vary too much across transitions. The alignment is also strengthened by the inclusion of new subjects in some jurisdiction's pre-primary curricula. However, there is still misalignment in some structural features. In the majority of jurisdictions, children have a less favourable staff-child ratio during their first year of the primary school than during their final year of ECEC, causing issues for continuity of learning and well-being. Other remaining challenges include: differences and inconsistencies in curricula; lack of shared pedagogical understanding between the two systems; and inconsistent delivery of pedagogy during transitions.

Developmental Continuity. In the majority of participating jurisdictions, children and parents are prepared for the transition to primary school through activities in the final year of ECEC. Moreover, the majority of jurisdictions offer special needs children specialist support during or after transitions, through collaboration with other community services. Exchanges between school teachers and ECEC staff on child development are also key. However, countries, municipalities, ECEC settings and schools vary in their recognition of the importance of children's participation in transition preparations, and to inform policies and practices. Additional key challenges include: making parents aware of the importance of the transition process, and engaging their involvement, particularly parents from disadvantaged backgrounds; promoting balanced relationships and understanding between ECEC staff and primary school teachers; and increasing co-operation with other child development services.

Policy Pointers. Lessons from the country experiences raise some cross-cutting points for consideration to guide and inspire policy makers striving to ensure continuity in transitions. **Place a greater focus on making schools ready for children, not children ready for school.** A child-centred perspective to transitions means adapting the cultures of both ECEC and school to the needs of the child. **Seek to dispel some common myths and misconceptions surrounding transitions** to increase understanding that transitions are multi-directional, dynamic change processes, to which many children may not easily adjust. Transitions require the shared responsibility of many stakeholders, including parents, social services, ECEC staff, primary school teachers, and national and local authorities. **Explore ways to overcome structural roadblocks to co-operation and continuity** to create a more favourable environment for transitions. **Try to encourage local leadership, backed by a clear national policy framework**, to contribute to ensuring that transitions match local needs, diverse cultural and socio-economic backgrounds, and (parental) expectations. **Make steps towards mainstreaming transitions into existing equity measures**, including financial support, to account for the importance of transition challenges for children from disadvantaged backgrounds. This implies understanding these challenges and finding ways to work more with parents to create trust and foster closer relationships across marginalised communities. Finally, **develop measures to support research and monitoring for better policy decisions**, as research may highlight the specific transition factors linked to improved child development, and transition monitoring can help to identify good practices.

Chapter 1

Overview: Towards smooth transitions from early childhood education and care to primary school

The transition from early childhood education and care to primary school is a big step for most children. A supportive and stress-free experience at this stage is likely to influence whether or not they can develop their full potential at school, academically and socially. Political and social attention on early learning and its transitions has increased over the past decade in many countries, but comprehensive knowledge of what policies and practices are needed for successful transitions is lacking. This chapter provides an overview of the key findings of OECD research to take stock of transition policies across OECD and partner countries. It summarises the main messages from the four thematic chapters of this report, which explore the organisation and governance of transitions, as well as how countries are ensuring professional, pedagogical and developmental continuity from early childhood education and care to primary school. It begins with six “cross-cutting” policy pointers for future policy development on transitions.

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.

The data collected through the OECD questionnaire on transitions for Italy is published here under the responsibility of the National Institute of Evaluation of the Educational and Training System (INVALSI, Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione).

Key policy messages

This study outlines how OECD countries and partner countries are working to improve children's transition from early childhood education and care (ECEC) to primary school. It includes a wide range of strategies, policies and practices to ensure "continuity" between and across various aspects, including governance and organisation (Chapter 2), professional continuity (Chapter 3), curriculum and pedagogical continuity (Chapter 4), and developmental continuity (Chapter 5). Each chapter concludes with a selection of policy pointers which summarise the key policy-relevant lessons learned from the study. From these we have distilled six "cross-cutting" policy pointers for future policy development on transitions (described in more detail in Chapter 6):

1. Focus on making schools ready for children, not children ready for school

Transitions are often linked to the term "readiness", which in many countries refers to a child's "readiness for school". To make children "ready", the approach often taken involves exposing children who are still in ECEC to the culture of primary school. Known as "schoolification", this can drive ECEC settings to adopt practices that are usually more related to primary school, such as higher staff-pupil ratios, longer hours away from home, more teacher-directed pedagogies, greater attention to academic content and less playtime. However, research is increasingly highlighting that the more age- and child-appropriate the pedagogical practices, the greater the benefits for children's social and cognitive development. This is why some countries – especially the Nordic countries – take a child-centred perspective, adapting the cultures of both ECEC and school to the needs of the child. This implies that it is not just the responsibility of ECEC to prepare children for school; schools also need to be ready for children. These debates merit careful review by both ECEC and the early years of primary schooling to ensure that systems are appropriate to the child's age; to the child's optimal learning progression, continuity and coherence; and to the specific individual needs of the child.

2. Dispel some common myths and misconceptions surrounding transitions

The concept of "transitions" needs to be better understood by those involved. The countries participating in this study have raised some common challenges: fragmented coherence and lack of consistency in goals, curriculum, and pedagogical practices between the two sectors; and lack of co-operation and collaboration among actors. These are rooted in differing perceptions, ideologies, philosophies and expectations of the various actors participating in transitions. Areas of misunderstanding include that a smooth transition is a question of ECEC aligning with primary education, when in fact the process is multi-directional; that it is a one-off event, when in fact it is a dynamic change process; that it is an organic and unproblematic process, when in fact many children may not adjust easily to the new learning environment; and that co-operation between ECEC and primary school is enough, when in fact it is the shared responsibility of many stakeholders, including parents, social services, ECEC staff, primary school teachers, and national and local authorities.

3. Overcome structural roadblocks to co-operation and continuity

Countries need to improve the structural conditions to allow ECEC and primary school staff to co-operate. Long working hours can leave little time to prepare and implement transitions and to co-ordinate with other settings. Physical separation of ECEC centres and primary schools hinders liaison and children's familiarisation with the school setting. Discrepancies in ECEC staff and primary school teachers' salaries, working conditions and level of qualifications (see Table 1.5) can raise tensions across sectors and limit co-operation. Legal restrictions can complicate the exchange of information on individual children and child records between ECEC centres and primary schools, rendering individualised transition support and co-operation more complicated. Solving these structural issues is the role of leaders and policy makers. Providing accommodating legal environments, such as Wales' provisions for the exchange of child records, and allowing staff sufficient time to co-operate, can be important steps forward. Where possible, integrating centres and schools on the same campus can be very helpful (e.g. Wales (United Kingdom), Austria and many northern European countries). Low-cost solutions also exist, such as appointing transition co-ordinators or counsellors, or organising catchment-level co-ordination mechanisms (e.g. Slovenia, Sweden and Denmark).

4. Encourage local leadership, backed by a clear national policy framework

There is a need to raise awareness at the national level of the importance of transitions, while fostering local leadership and ownership so that transitions match local needs, diverse cultural and socio-economic backgrounds, and (parental) expectations. Transition policies and practices that consider and are adapted to particular contexts and individual needs are more likely to be effective in promoting a smooth start in school. Ensuring national coherence alongside local autonomy can mean taking a combined approach, encouraging both national and local leadership. For example, the Welsh Government has an overarching strategy for breaking the links between poverty and deprivation (Rewriting the Future), while delegating leadership to Regional Education Consortia to support schools to take forward key priorities at the local level. In Norway, municipalities take the responsibility for ECEC and primary school, while the national government makes strategic decisions to ensure effective transitions for all children.

...

5. Mainstream transition into existing equity measures

Although strong transitions are important for everyone, they are particularly important for disadvantaged children, who are at greater risk of developmental losses once they start primary school. Such children include those from low socio-economic backgrounds; with immigrant or indigenous backgrounds; living in poor areas or regions; and with special needs. These background factors often overlap, making the process of transitions for the child far more complex as it involves multiple hindering factors, suggesting bigger social, economic and cultural differences between the child's home environment, and ECEC and primary school. This calls for systemic interventions involving not only ECEC and primary schools, but also community and family services, health and social services. Research has shown that children's – especially disadvantaged children's – early school adjustments, social skills and academic competence are enhanced when children and families participate in "comprehensive transition programmes". These are developed in collaboration with stakeholders and offer children and their families a number of opportunities to get familiar with school in formal and informal settings. It is important that transition challenges for disadvantaged children are properly understood and that transitions are mainstreamed into various equity measures.

6. Support research and monitoring for better policy decisions

There is a general consensus on the scarcity of research on transition and, in particular, on specific factors that are linked to improved child development. It is important to close the current knowledge gap in order to support policy makers to make better-informed decisions. The following questions have been identified in the report as needing more investigation: Should the final year of ECEC be compulsory? Should the number of ECEC hours be increased? Which is preferable – a half-day or full-day of ECEC? What factors positively influence transition processes and outcomes for children and their parents? What factors influence the participation of children and families in transition programmes? What are the effects of transition practices on at-risk or disadvantaged children and parents?

Encouraging more monitoring of transitions can also help to understand whether ECEC settings and schools are delivering good practices, to even out quality across regions and to provide feedback for further development. Jurisdictions, however, report that transitions are not commonly monitored (see Table 1.5).

Introduction

The first years of life lay the foundations for future skills development and learning. Investments in high-quality early childhood education and care (ECEC) and smooth transitions between the various stages of early education are key for children's long-term learning and development.

The political and social attention on early learning and its transitions has increased over the past decade in many countries, with a particular focus on the transit from the last period of early childhood education and care to the start of primary school. This transition – together with the transition from home to an ECEC setting – are the first occasions in which children experience a big cultural change – in the people surrounding them, the ways in which they interact, their number of peers, the types of activities they are engaged in, and their physical surroundings. A successful experience at this stage is likely to influence whether or not they can develop their full potential, and their ability to cope with future transitions.

Despite the importance of well-managed transitions for children's well-being and early development, there is little policy knowledge on how countries design, implement, manage and monitor transitions. Understanding how the transition between ECEC and primary education is organised across OECD countries is important for policy makers to ensure that early years' policies provide continuity of the ECEC benefits into primary education; promote a strong start in primary school; and foster a more equitable early education system.

To build a solid knowledge base on this topic, in 2015 the OECD Education Policy Committee mandated the OECD Secretariat to take stock of transition policies across OECD countries. This report presents the findings. It draws on a literature review, in-depth country reports by 8 OECD countries and 1 partner country,¹ and a questionnaire completed by 27 OECD countries and 3 partner countries

(Colombia, Croatia and Kazakhstan) (details in Annex A). This overview chapter summarises the main findings, lessons and policy orientations. Table 1.5 at the end of the chapter compares the responses of all participating OECD and partner countries.² It uses an indicator approach to compare the weight given to ECEC and primary education in a range of sub-topics within the four key areas discussed in this report. This acts as an “at a glance” tool for comparing the degree of integration and alignment between ECEC and primary.

What are transitions and why do they matter?

Research in neuroscience shows that the brain sensitivity of highly important developmental areas – such as language and numeracy, social skills and emotional control – peaks in the first three years of life (Naudeau et al., 2011). Strong foundations in the early years increase the chances of positive outcomes, while weak foundations are more likely to lead to struggles.

Children will experience a number of transitions over their lifetime (Box 1.1). The rapid growth of and participation in early childhood education and care (OECD, 2016a) means that increasing numbers of young children experience not only a transition from home to school, but also a transition (and sometimes two) between ECEC and school (Dunlop and Fabian, 2006; Woodhead and Moss, 2007). There is a risk that the positive impacts of ECEC can decrease or even disappear during the first years in primary school if these transitions are not well-prepared, or if continuity in quality is not ensured in primary education (Magnuson et al., 2007; Barnett and Hustedt, 1995; Woodhead, 1988). This might be the case if there is little co-ordination and communication between families and other ECEC or child-related services; if there is a lack of collaboration between the ECEC and the primary school sector; or if staff are not trained or prepared to help children through these transitions (AIHW, 2009). To reduce these “fade-out effects”, ECEC needs to be followed up by subsequent quality education throughout school, and particularly during the first years of primary education (Woessmann, 2008).

Box 1.1 Key definitions: Early childhood transitions

Fabian (2007) defines transition as “a change process” that children go through from one stage to another. This can include horizontal and vertical transitions. **Horizontal transitions** involve children’s transitions during their everyday lives between, for instance, a pre-primary education setting (see Glossary) or primary school and an after-school centre. **Vertical transitions** refer to the transitions between different educational settings, such as between an ECEC setting and school (Kagan, 1991; Ackesjö, 2013).

Throughout this report the term **early childhood education and care** (ECEC) will be used to refer to regulated arrangements that provide education and care for children from birth to compulsory primary school age in **integrated systems**, or from birth to pre-primary education in **split systems**. The International Standard Classification of Education (ISCED) is the reference classification for categorising education programmes and related qualifications by education levels and fields. The latest version (ISCED 2011) has nine levels of education, from level 0 to level 8, where ISCED 0 refers to early childhood education and ISCED 1 refers to primary education. Education programmes at ISCED level 0 are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02). The latter include ECEC centres that provide services for children to support early development in preparation for participation in school and society, and that accommodate children from age three to the start of primary education. The focus of this publication is on ISCED 02 and the terms pre-primary, preschool and ECEC are used interchangeably.

For more information, see the Glossary and OECD/Eurostat/UNESCO Institute for Statistics (2015), ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications, <http://dx.doi.org/10.1787/9789264228368-en>.

There are three main reasons for ensuring that policy attention is given to well-managed transitions: 1) ensuring that the benefits of ECEC endure; 2) preparing children for school and for life; and 3) improving equity in education outcomes.

Ensuring that the benefits of early childhood education and care endure

A consolidated body of research has shown that participation in high-quality ECEC will benefit children's early development, their subsequent school career, and their labour market success and social integration (Sammons et al., 2008; Sylva et al., 2004). Many countries have increased public spending to expand participation in quality ECEC so as to improve child development, learning and well-being. Expenditure by OECD countries on ECEC (ISCED 0) increased on average 45% between 2000 and 2013, from 0.48% of gross domestic product (GDP) to 0.69% (OECD, 2017a). What is more, in one-third of OECD countries with available data, annual expenditure per child is higher in pre-primary education than in primary education (Table 1.5 at the end of this chapter), reflecting the importance given in some countries to investing in the early years and making it a public responsibility.

Quality transitions that are well-prepared and child-centred, managed by trained staff collaborating with one another, and guided by an appropriate curriculum, enhance the likelihood that the positive impacts of early learning and care will last through primary school and beyond.

Research findings confirm the importance of a good quality transition and a good start in primary school. In a study in the United Kingdom, most positive developmental gains were found for children who had attended high-quality early preschool education, with larger and more lasting benefits for children who subsequently attended high-quality primary schools (Sammons et al., 2008). Creating an overall set of educational experiences that build on one another during the ECEC and early school years can reduce the fade-out effects. This includes aligned staff quality, curriculum and pedagogical approaches (Bogard and Tananishi, 2005; Kagan and Kauerz, 2012; Stipek et al., 2017). Thus, the impact of early educational experiences may be conditioned heavily by the ongoing quality of school learning experiences (Magnuson et al., 2007). In short, good quality in the early years has to be followed up with good quality in subsequent school systems. This suggests that effective transitions cannot be solely designed and implemented by ECEC – it is the shared responsibility of both ECEC and primary school. Quality matters at both levels.

Quality matters at both levels

Preparing children for school and for life

The second policy interest is to prepare children for school and for life. Policy makers, practitioners and parents believe that ECEC provisions should make children "ready for school" (Lillejord et al., 2017; Woodhead and Moss, 2007; see Box 1.2). Research has shown that a positive start at school is associated with long-term positive learning and well-being outcomes both in school and outside of it (Margetts, 2014; Vrinioti et al., 2010).

For the child, the transition from the last year of ECEC to primary school is a period of excitement and pride as well as of insecurity, anxiety and nervousness in the face of the new and unfamiliar (Lillejord et al., 2017). Most children tend to navigate the transition process smoothly, but some children struggle, experiencing problems such as restlessness and anxiety (Lillejord et al., 2017; Jindal-Snape and Miller, 2010). Findings from the United States show that between 13% and 20% of children struggle as they make the transition and adjust to school (Carter et al., 2010; Hausken and Rathbun, 2002; Rimm-Kaufman and Pianta, 2000). These figures call for a look into how best to support children during the transition period. The cost of school readiness is often contrasted with the cost of inaction or the costs that will be required for expensive interventions at a later stage. It is estimated that the benefit-cost ratio of attending preschool in terms of future earnings ranges between 6:1 and 17:1 (IOM and NRC, 2014). Note that the latter values are likely to underestimate inaction costs (costs of not investing in preschool) as they only account for future earnings and they are likely to vary across countries.

Box 1.2 School readiness and schoolification

The research on children's transitions often raises concerns surrounding the increased "schoolification" of early childhood settings. Schoolification refers to when ECEC settings adopt practices that are usually more related to primary school in order to prepare children for the transition. But these practices might occur before children are ready developmentally to cope with them, including higher staff-pupil ratios, more hours spent away from home, more teacher-directed pedagogies, greater attention to academic content and less playtime. Research highlights the importance of developmentally appropriate practices based on children's age and developmental stage. The more age- and child-appropriate the pedagogical practices are, the greater the effect is on children's social and cognitive development (Litjens and Taguma, 2010; OECD, 2012).

Transitions are often linked to the term "readiness", which in many countries refers to a child's "readiness for school". In other countries, "readiness" refers to "readiness for life" or "readiness for lifelong learning". In recent years, the "readiness" rhetoric is changing. It is no longer for ECEC alone to prepare children for school; today, there is a growing perception that schools also need to be ready for children coming from the age-appropriate ECEC environments. Indeed, some countries have started to regard "readiness" as not only "readiness for school/ life" but also "a school's readiness for the child". In the Nordic countries, this has been the main approach for some time. A successful transition not only ensures that a child is ready to leave the ECEC setting and start primary school, but also makes sure that the ECEC setting the child is leaving and the school the child will join are both prepared for the transition. This suggests the need for primary schools to also collaborate with ECEC for better "readiness" for children.

Transition to primary school is considered a foundation for lifelong learning. Participation in ECEC is viewed as the first step in a person's development, and gains made should be carried upward into primary school. Pedagogical thinking in the Nordic countries, for instance, holds that early childhood pedagogy, with its emphasis on the natural learning strategies of the child, should be respected and reflected in the early classes of primary school (Pramling and Pramling Samuelsson, 2011). In Sweden, for example, when preschools were brought into the education system in 1996, the then Prime Minister Göran Persson talked of ECEC as "the first step towards realising a lifelong vision of lifelong learning", adding that "the preschool should influence at least the early years of compulsory schooling" (cited in Korpi, 2005). Similarly, Japan's philosophy of education is based on continuity and coherence. The objective of early childhood education and care is to cultivate foundations for the lifelong formation of one's character. The tradition is that ECEC is regarded as a "period of awakening learning", while school is a "period of self-conscious learning", and that these flow seamlessly into one another.

Improving equity in education outcomes

Transitions are of particular importance for children from disadvantaged backgrounds. Children enter school with a wide variety of skills and abilities that significantly contribute to their later school success or difficulties. Evidence from the United States shows a positive and continuous association between socio-economic status and children's skills distribution in the last year of preschool, with children from better-off backgrounds performing significantly better than their less well-off peers across a wide range of cognitive and social and emotional skills (García, 2015).

Findings from the OECD Programme for International Student Assessment (PISA)³ also show that the probability of low performance in mathematics is largely the result of cumulative social and economic disadvantages (OECD, 2016b). Missing out on attending pre-primary education affects disadvantaged children more than it affects advantaged children. On average across OECD countries, a socio-economically advantaged student who did not attend pre-primary has an 8% probability of low performance in mathematics, whereas a disadvantaged student who did not attend has a 25% probability of low performance. This gap increases when other risk factors are also present, such as an immigrant background, speaking a different language at home, and living in a single-parent family (OECD, 2016b).

Transitions are harder for disadvantaged children as they are exposed to the interaction of multiple risk factors, including a low-quality home learning environment; low teacher expectations for their competence; and different expectations for parent-teacher interactions (Peters, 2010). The socio-economic-based skills gap in the last year of preschool makes the transition period a critical one. Children from disadvantaged backgrounds are more likely to attend low-quality ECEC settings and schools and hence are more likely to experience low-quality transitions (Currie and Thomas, 2000; Zhai, Raver and Jones, 2012). They are therefore at greater risk of developmental losses (Melhuish et al., 2015) and of fade-out effects (Currie and Thomas, 2000; Zhai, Raver and Jones, 2012). Currie and Thomas (1995) found, for instance, that the gains of participation in the United States' Head Start ECEC programme faded out for African-American children over the early years, while white children's educational gains of ECEC participation persisted into adolescence as they attended better quality schools than their African-American peers. Therefore, children and families with socio-economic risk factors are most likely to benefit from good transition activities (LoCasale-Crouch et al., 2008).

Good quality transitions include numerous activities that involve personal contact with parents and children. These occur both before and after the child transits to primary school, for example preschoolers spending time in their future classrooms; parents and children visiting school prior to the start of the school year; parents attending orientation sessions prior to the school year; shortened school days at the beginning of the school year; and teachers visiting children's homes at the beginning of the school year (Schulting et al., 2005). It has been found that strong transitions involving collaboration and support among staff, parents and children before, during and after the transition period can improve equity in education (Melhuish, 2014).

Strong transitions can improve equity in education

What does the literature say about the ingredients of successful transitions?

An emerging body of research highlights certain traits of effective transition policies, programmes and practices. Alignment of ECEC and primary school curricula, pedagogical continuity, and transition practices between ECEC and primary school has a positive impact on children's literacy and numeracy skills as well as on their later experiences and development (Ahtola et al., 2011; Margetts, 2007). Other research suggests that greater continuity at staff, practice and pedagogical level where settings, parents, the community and child development agencies collaborate, can result in better support for the child in the transition phase (Arndt et al., 2013; Ahtola et al., 2010; Lillejord et al., 2017; Peters, 2010).

Existing research suggests the following traits to be elements of successful transition programmes (Lillejord et al., 2017; Ackesjö, 2013; Dobbin, 2013; Dockett et al., 2011; Hirst et al., 2011; Peters, 2010; Dockett and Perry, 2006; Pianta and Kraft-Sayre, 2003):

- shared views between ECEC settings and schools on transitioning
- alignment and balance between what and how children learn in ECEC and primary school (i.e. curriculum and pedagogical practices)
- shared understandings on individual differences and how each child learns differently
- collaborative practices between preschool and primary school teachers, such as sharing written information on child development and children's experiences
- alignment of pedagogical understanding of preschool and primary school teachers through training
- alignment of working conditions of preschool and primary school teachers
- flexibility and responsiveness to individual communities, families and children
- collaboration among staff, managers, parents and the community based on reciprocal communication, inclusivity, mutual trust and respect.

What are OECD countries doing to improve transitions?

The research underpinning this report finds that OECD countries have introduced a wide range of strategies, policies and practices to ensure continuity in transitions. This report categorises these into four key areas, which in reality are all interdependent:

- 1) organisation and governance (the subject of Chapter 2)
- 2) professional continuity (Chapter 3)
- 3) curriculum and pedagogical continuity (Chapter 4)
- 4) developmental continuity (Chapter 5).

The governance and organisation of early childhood transitions are receiving greater attention

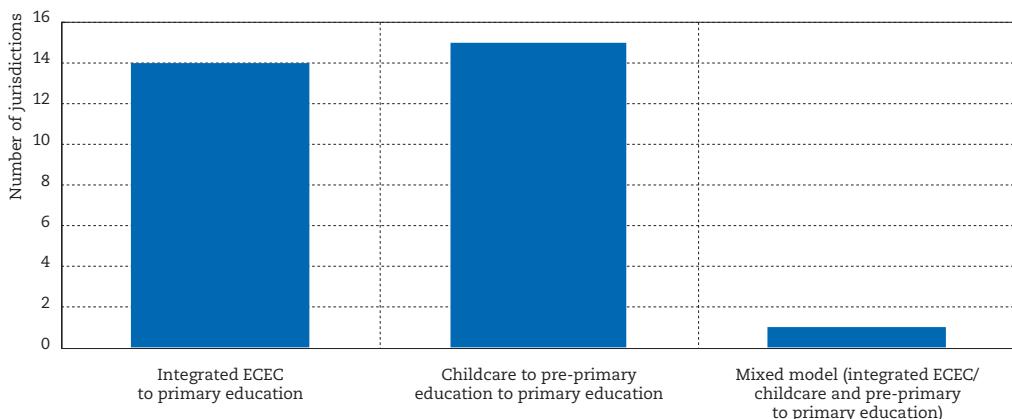
Understanding how the transition between early childhood education and care (ECEC) and primary education is organised and governed across the OECD is important to help policy makers ensure that the foundations laid in ECEC endure into primary education; promote a strong start in primary school; and foster a more equitable early education system. Comparisons across the countries participating in the study reveal some clear trends.

Trends in governance

- **Policy documents**, including education acts and curriculum frameworks, are placing greater emphasis on the need for smooth transitions. This is obliging local authorities, ECEC settings and schools to implement appropriate policies and practices.
- **Responsibilities for ECEC are increasingly integrated** within the ministry of education, which facilitates collaboration between education levels and can strengthen coherence between ECEC and schools.
- **Transition policies and practices differ widely within countries**, being mostly designed by ECEC settings and schools.
- **Transitions are not commonly monitored separately**; they are often included in broader quality monitoring. Parental surveys are the most common tool, followed by child monitoring methods (e.g., portfolios, child development reports or development assessments).
- **Annual expenditure per child is lower for pre-primary education than primary education** in two-thirds of participating countries (see Table 1.5).

Trends in organisation

- **A large share of children experience more than one transition before they start primary school** (in 50% of participating countries). Many children transition from childcare to pre-primary education and then to primary school (Figure 1.1).
- **Compulsory education can start as early as age three**, though most children start compulsory education at six. The age range of compulsory education is broad: from three (Hungary and Mexico) to seven years old (Sweden). Most children start compulsory education with the start of primary school. In 40% of countries, compulsory education starts with preschool. Children's starting age at primary school is rarely delayed, and is usually done so for health or developmental reasons.
- **A separate transition class, year or group** is available for children in their last year of ECEC in over half of the participating countries. In almost half of these, this phase is compulsory.

Figure 1.1 Half of all children experience two transitions before they reach primary school (2016)

Note: Information on transition year is based on data from 30 countries and jurisdictions: Austria, Flemish Community of Belgium, Canada, Chile, Colombia, Croatia, Czech Republic, Denmark, Finland, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and Wales (United Kingdom). Data by country can be found in the annex to Chapter 2 (Annex 2A, Table 2A.1).

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495365>

Challenges

While the topic of transitions is gaining political attention, and progress has been made, governance and organisational challenges remain. Table 1.1 summarises the most common challenges put forward by the OECD countries participating in this study. It also highlights some good practice policy strategies developed by the various countries to tackle these challenges. The details of these challenges and strategies can be found in the Chapter 2, along with a wealth of practical and good practice examples.

Table 1.1 Governance and organisational challenges and policy strategies

Challenges	Key policy strategies
• Lack of coherence across regions in transition approaches	<ul style="list-style-type: none"> • Develop a national plan or strategy to improve coherence • Develop guides or guidelines
• Difficulty in engaging all actors	<ul style="list-style-type: none"> • Monitor the state of transitions • Include transitions in laws or mandatory curriculum frameworks • Inform local governments and settings of example transition initiatives
• Weak collaboration among stakeholders	<ul style="list-style-type: none"> • Review collaboration frequently • Discuss transitions with key stakeholders regularly • Provide counselling and guidance
• Inequity in transitions	<ul style="list-style-type: none"> • Provide language support • Set up financial support programmes • Prioritise participation in ECEC for target groups • Provide additional financial or human resources for ECEC settings

Challenge 1: Lack of coherence across regions in transitions approaches

Where settings have autonomy in deciding how transitions are taken care of, the result can be a wide range of practices with little alignment between them. This can be the case in federal states, where systems are decentralised, for example. Decentralisation of transition responsibilities results in variations among municipalities in how transitions are handled, and thus, in varying levels of transition quality. Strategies developed to tackle this include developing a national plan or strategy to improve coherence (Austria), and developing guides or guidelines (Denmark and Norway).

Challenge 2: Difficulty in engaging all actors

While national or federal authorities, or research findings, may emphasise the importance of good transitions, it is important that the authorities and settings involved in implementation (i.e. local authorities, ECECs and schools) share the enthusiasm and implement them correctly. Countries have come up with a range of strategies for dealing with this, such as monitoring the state of transitions (Japan), including transitions in laws or mandatory curriculum frameworks (Denmark, Finland and Norway), and informing local governments and settings of example transition initiatives (Japan).

Challenge 3. Weak collaboration among stakeholders

The need for involvement and collaboration of the various stakeholders involved in transitions is essential to ensure a strong start at school. Countries outline many obstacles to such collaborations, driven by multiple factors that include physical location, legal restrictions, professional misconceptions and jealousies, and lack of resources and time. To improve and strengthen collaboration at the governance level, some countries regularly monitor the quality of their collaboration (Japan and Sweden), while others discuss the topic of transitions with different stakeholders on a regular basis (Slovenia and Sweden), or provide guidance to stakeholders (the Netherlands and Slovenia). The other chapters in the report all include strategies for improving collaboration for their specific goals – see the sections below and the individual chapters.

Challenge 4. Inequity in transitions

Transitions are of critical importance for children from disadvantaged backgrounds who are more likely to struggle when starting school. While countries have implemented a wide range of policies and programmes to improve equity in the early years, these programmes do not necessarily focus on the transition to primary school. Initiatives to fill these gaps include providing language support to ensure that all children have an adequate level of language and literacy skills when starting school (Denmark, Slovenia); setting up financial support programmes, prioritising participation in ECEC for certain target groups and providing additional financial or human resources for ECEC settings (Japan, Denmark, Norway, Slovenia and Wales (United Kingdom)); prioritising participation in ECEC for certain target groups (Denmark, Norway and Slovenia); and providing additional financial or human resources for ECEC settings (Finland, Slovenia and Sweden).

Professional continuity is improving, but gaps remain

Professional continuity requires that ECEC centre leaders, primary school principals, ECEC staff and primary school teachers are prepared for collaboration and transitions through professional development and initial training, and that they receive relevant and sufficient support to facilitate children's transition to primary education (Neuman, 2007). Thus, while professional continuity is crucially dependent on training and development, it is also framed by the structural and procedural environment in which teachers operate (Chapter 3). This includes the working environment, salary and work benefits, and the degree to which levels of status and recognition vary between ECEC and primary school professionals. For instance, to align working conditions across sectors, the International Labour Organization (ILO), recommends setting salaries in pre-primary education at the “same level as the equivalent job in primary education with similar qualifications and competency requirements” (see Table 1.5) (ILO, 2013). Professional continuity can be seen as a facilitating factor for ensuring continuity in pedagogical practices, discussed in Chapter 4, and continuity from a child development perspective, as discussed in Chapter 5.

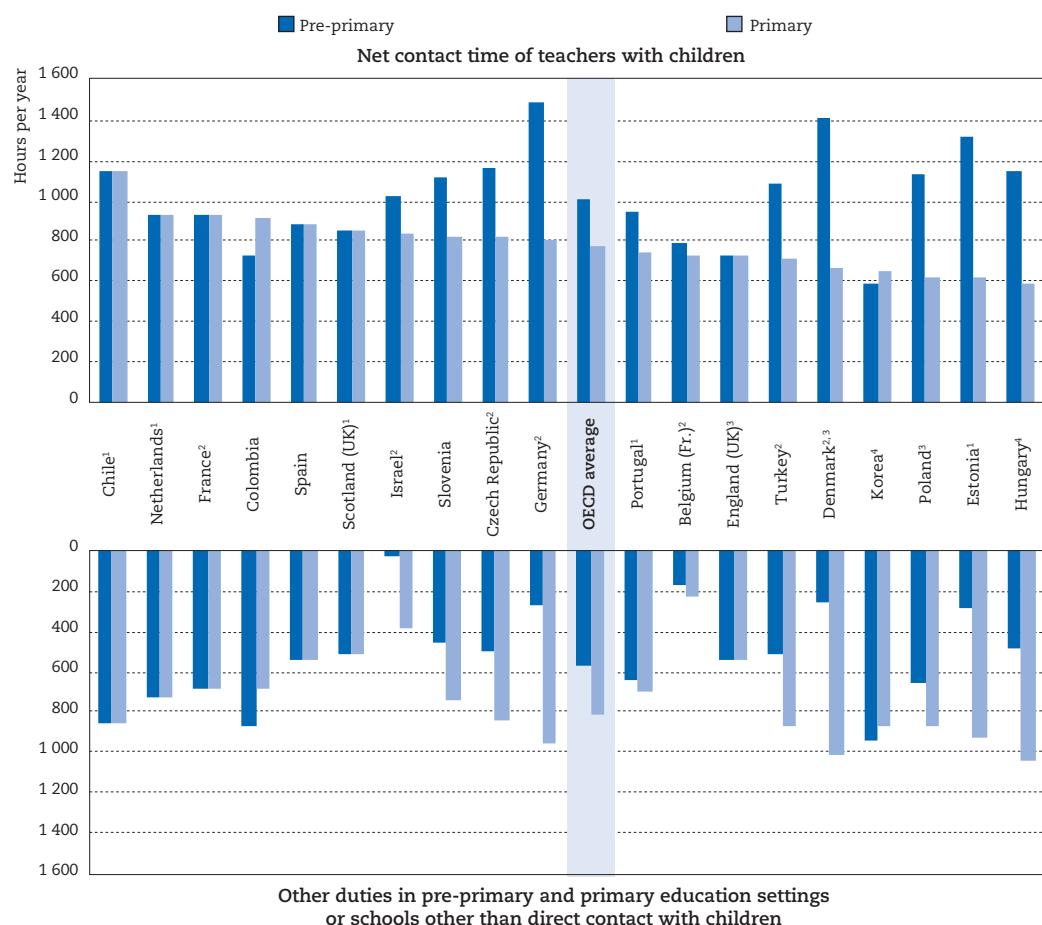
**Professional continuity is framed
by the structural and procedural
environment**

Trends in professional continuity

Insights from this study (see Chapter 3) suggest that:

- Preschool and primary teachers are commonly being taught about transitions in their pre-service training (17 out of 22 countries for ECEC staff, 15 out of 22 for primary teachers) and in professional development (13 out of 22 countries for ECEC staff, 13 out of 22 for primary teachers) (see Table 1.5).
- Qualification levels required for preschool and primary teachers are being brought into line in almost two-thirds of countries.
- Pre-primary teachers often have less working time than their primary school peers for non-teaching tasks or tasks other than being in contact with children (11 out of 19 countries). Six countries (Chile, the Netherlands, France, Spain, Scotland and England (United Kingdom)) already ensure the same time for teaching and non-teaching tasks at both levels (Figure 1.2 and Table 1.5).

Figure 1.2 Most pre-primary teachers in the OECD spend more hours in direct contact with children than primary teachers (2014)



Notes:

1. Maximum teaching time.

2. Typical teaching time (in Denmark, for pre-primary level only).

3. Actual teaching time (in Denmark except for pre-primary level).

4. Minimum teaching time.

Countries are ranked by descending order according to the net teaching time in hours for teachers in primary schools.

Only countries with available data for both pre-primary and primary level were included. Contact time refers to statutory teaching or contact time in public institutions. Non-contact or non-teaching time covers tasks such as assessing students, preparing lessons, correcting students' work, professional development and staff meetings.

Source: OECD (2017), Online Education Database, www.oecd.org/education/database.htm.

StatLink <http://dx.doi.org/10.1787/888933495375>

Challenges

Table 1.2 summarises the most common professional continuity challenges put forward by the OECD and partner countries participating in this study. It also highlights some good practice policy strategies developed by the various countries to tackle these challenges. The details of these challenges and strategies can be found in Chapter 3, along with a wealth of practical and good practice examples.

Table 1.2 Challenges and strategies in strengthening professional continuity

Challenges	Key policy strategies
• Discrepancies between status and perspectives of ECEC staff and primary school teachers	<ul style="list-style-type: none"> • Equal pay for qualified ECEC staff and primary school teachers • Align the level and bridge the content of pre-service training
• Lack of relevant training in and support for transitions at both levels	<ul style="list-style-type: none"> • Offer more and relevant transition-specific training • Meet teachers' and staff support needs
• Structural hurdles to co-operation and co-ordination	<ul style="list-style-type: none"> • Make legal provisions for the exchange of information • Ensure time and physical conditions to co-operate

Challenge 1: Discrepancies between status and perspectives of early childhood education and care staff and primary school teachers

Several countries highlight that ECEC and primary school staff do not necessarily see eye to eye and may not always “speak the same language”, which is explained by discrepancies in their status and educational background. In the United Kingdom, the ECEC sector is poorly paid, making it challenging to ensure a sufficiently skilled workforce. In Germany, ECEC professionals and primary teachers know very little about each other’s work and pedagogical practices. To overcome these challenges, measures to align the working conditions, content and level of qualifications can be useful (as in Japan, where efforts are being made to align the training of pre-primary and primary school teachers).

Challenge 2: Lack of relevant training in and support for transitions at both levels

While the majority of countries reported that training on transitions is available as part of pre-service training or professional development, gaps persist. Staff and teachers may also not always receive the support they need to help all children in the transition process. To overcome these challenges, more – and more relevant – training on transitions could be helpful, as could gaining a better understanding of teachers’ and staff’s actual needs to target support. Several countries have developed measures to meet teachers’ and staff support needs, including Austria, Japan and Slovenia.

Challenge 3: Structural hurdles to co-operation and co-ordination

Even where guidelines and training on transitions are available, structural impediments may render co-operation and co-ordination across levels challenging in practice, potentially undermining other efforts to foster professional continuity. Longer on-site hours for kindergarten teachers mean less time for planning, and are a constraint to practices seeking to facilitate transitions. The separate locations of ECEC settings and primary schools can be a physical hurdle to continuity, making co-ordination time consuming. Child confidentiality regulations can also complicate the sharing of child development information across settings. Providing accommodating legal environments (Wales, United Kingdom) and allowing staff sufficient time to co-operate can help, as can bringing ECEC setting and primary schools together in the same premises (Austria, Italy and many northern European countries). Additional staff and support can also help teachers at both levels with their efforts to facilitate transitions (as in Slovenia where a counselling service provides professional support to children, parents and ECEC staff).

Pedagogy is becoming more aligned between pre-primary and primary levels

Pedagogy is the set of instructional techniques and strategies that enable children's learning to take place in educational settings (OECD, 2012). Continuity between ECEC and primary school in terms of curriculum and pedagogical transition practices has been found to have a positive impact on children's later experiences and development (e.g., Ahtola et al., 2011; Margetts, 2007). Research, for instance, has shown that aligning ECEC and primary school curricula can improve children's literacy and maths skills (Ahtola et al., 2011). The key ingredients of successful pedagogical continuity practices include high-quality and child-centred staff-child interactions; the joint creation of pedagogical transition practices by staff at both levels; informative curricula or guidelines for pedagogical transitions; a balanced curriculum with roughly equal emphasis on play, self-regulation and pre-academic activities; and similar structural features (e.g. group size and intensity of participation) in ECEC and primary school (Chapter 4).

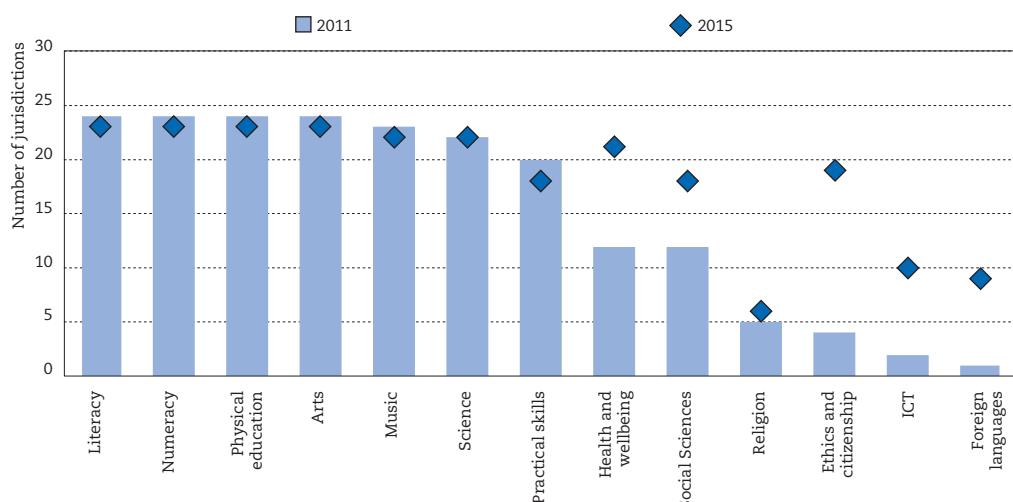
Aligning ECEC and primary school curricula can improve children's literacy and maths skills

Trends in pedagogical continuity

Insights from international comparisons suggest that:

- In 78% of participating jurisdictions, there is continuity in curricula between ECEC and primary school: 54% explicitly align the curricula for the two levels (e.g. Chile, the German Länder and Finland); while 24% have fully integrated curricula (e.g. Italy and Switzerland) (see Table 1.5).
- Many jurisdictions have included new subjects in their pre-primary curricula to reflect today's society: these include health and well-being, ethics and citizenship values, social sciences, ICT skills and foreign languages. These additions bring the pre-primary curriculum more into line with primary education (Figure 1.3).
- In 69% of the jurisdictions, children have a less favourable staff-child ratio during their first year of the primary school than during their final year of ECEC. In some jurisdictions, such as Chile, the Czech Republic, most German Länder, Mexico and Turkey, there can be up to 15 more children per staff member after transitioning to primary school (see Table 1.5).

Figure 1.3 **Jurisdictions are broadening their pre-primary curricula to include emerging learning areas (2011 and 2015)**



Note: Information on content areas of the curriculum is drawn from 24 countries and jurisdictions that responded to a survey in both 2011 and 2015. Learning areas are ranked in descending order for the number of jurisdictions declaring that the learning areas were included in their ECEC curriculum framework in 2011. Data by country can be found in the annex to Chapter 4 (Annex 4.A, Table 4.A.2).

Source: OECD Network on ECEC "Survey for the Quality Toolbox and ECEC Portal", June 2011 and 2015.

StatLink <http://dx.doi.org/10.1787/888933495385>

Challenges

While the topic of transitions is gaining political attention, and progress has been made, challenges to pedagogical continuity remain (Chapter 4). Table 1.3 summarises the most common challenges put forward by the OECD countries participating in this study. It also highlights some good practice policy strategies developed by the various countries to tackle these challenges. The details of these challenges and strategies can be found in Chapter 4, along with a wealth of practical and good practice examples.

Table 1.3 Challenges and strategies in strengthening pedagogical continuity

Challenges	Key policy strategies
• Differences and inconsistencies in curricula	• Develop an integrated curriculum framework and national guidelines • Invest in local knowledge and innovations
• Lack of shared pedagogical understanding between the two systems	• Reform curricula to ensure better pedagogical continuity • Provide opportunities for staff collaboration • Emphasise the role of primary school in receiving children
• Inconsistent delivery of pedagogy during transitions	• Create consistent structures • Create collaborative learning strategies

Challenge 1: Differences and inconsistencies in curricula

Although around two-thirds of jurisdictions have an ECEC curriculum that is either aligned or integrated with that of primary education, jurisdictions report three challenges due to differences between curriculum frameworks. Firstly, attention to transitions can be unbalanced in curricular documents for ECEC and primary education (Norway). Secondly, the goals and focus of education (and care) in curricular documents can be emphasised in different ways in ECEC and in primary education (Slovenia). Thirdly, decentralised responsibility for ECEC and primary education can lead to unaligned pedagogical approaches (Austria and Finland). Strategies to overcome these challenges include developing an integrated national curriculum framework and national guidelines (Austria and Ireland); actively involving preschool teachers and primary education teachers in curriculum development (Slovenia); and investing in local knowledge and innovations (Finland, Japan and Sweden).

Challenge 2: Lack of shared pedagogical understanding between the two systems

Pedagogical boundaries between ECEC and primary education have been recognised as important barriers to pedagogical continuity (Lillejord et al., 2017). Countries noted several ideological or practical boundaries that are hindering collaboration and hence coherence and continuity. For instance, it is difficult for ECEC and primary school teachers to find out about their counterpart's pedagogical practices (Norway). ECEC teachers may have different expectations for how children should be prepared for school and may use different methods and learning approaches than their primary school colleagues (Slovenia). Reluctance to change the working culture, practices and policies of both levels of education is an important continuity challenge in Finland. Innovative solutions developed by countries include reforming curricula to ensure better pedagogical continuity (Finland, Portugal, Scotland and Sweden); providing opportunities for staff collaboration (Austria, Norway, Portugal, Slovenia and Wales); and emphasising the role of primary school in receiving children (Norway's focus on the child-ready school, instead of the school-ready child; Portugal, and Sweden).

Challenge 3: Inconsistent delivery of pedagogy during transitions

Despite efforts to align or integrate the curricula between ECEC and primary schools, inconsistencies in the practice of pedagogy may arise locally (Tarrant and Kagan, 2010). When several types of facilities are involved in the transition phase, and where communication among them is not clear enough, pedagogical practice can be inconsistent. For example, in many Danish municipalities, children graduating from ECEC start in the primary school's after-school programme in the spring, whereas the actual transition to school does not take place until August. This long transition period involves many stakeholders, and there are no requirements for the staff working in the after-school programme to apply the pedagogical curriculum for ECEC, thereby creating a gap between ECEC and primary school curricula. Strategies to tackle these issues include ensuring consistency in structures (Denmark) and creating a collaborative learning strategy (Wales).

Developmental continuity is largely promoted through collaboration

To ensure continuity in young children's development, high-quality ECEC needs to be followed by quality education throughout school, and particularly during the first years of primary education. Collaboration is the watchword for developmental continuity, and is explored here for a range of actors involved in child development, including children themselves, their parents, ECEC and primary school staff, and community services (Chapter 5).

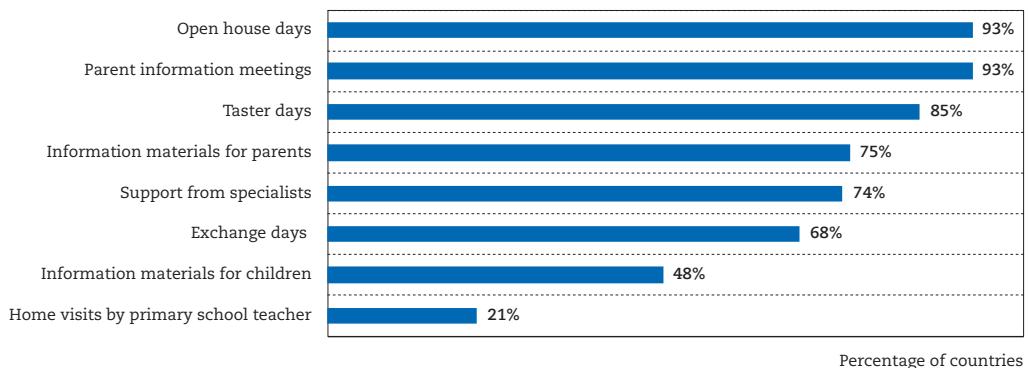
**Collaboration is the watchword
for developmental continuity**

Trends in developmental continuity

Insights from the study's international comparison suggest that:

- **In 93% of jurisdictions, children are being prepared for the transition to primary school** through activities in the final year of ECEC (Figure 1.4). The most common transition activities are visits to the primary school (93%); parent information meetings (93%); and taster days at primary schools (85%).
- **Jurisdictions vary in how they include children's views in transition preparations:** while some jurisdictions recognise the importance of children's participation in their curriculum frameworks and/or education acts (e.g. Denmark, Finland, Norway, Sweden and Wales), in practice children's involvement differs across municipalities, ECEC settings and schools.
- **Most (74%) of jurisdictions offer special needs children specialist support** (e.g. from psychologists or social care workers) during or after transitions. The important role of community services in ensuring developmental continuity in transitions is recognised in the majority of countries.
- **Staff-parent collaboration is likely to be higher in preschool than in primary school.** For example, sharing child development information is much more prevalent in preschool than in primary school (93% and 70%, respectively).
- **Collaboration among teachers takes several forms:** including school and ECEC exchanges, sharing information on child development, and forming collaborative professional learning groups as platforms to exchange ideas and practices across sectors.

Figure 1.4 Most jurisdictions offer transition practices to prepare children for their transit to school (2016)



Notes: Information on transition activities is based on 27-28 countries. Complete information differs by question.

Data by country can be found in Annex 5.A, Table 5A.1

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495393>

Challenges

Table 1.4 summarises the most common challenges mentioned by the OECD countries participating in this study. It also highlights some strategies developed by the various countries to tackle these challenges. The details of these challenges and strategies can be found in Chapter 5, along with a wealth of practical and good practice examples.

Table 1.4 Challenges and strategies in strengthening collaborations to enhance developmental continuity

Challenges	Key policy strategies
• Children's views are not fully accounted for when shaping policies and practices for transitions	• Specify in education acts or curricula children's right to participate • Conduct research involving children
• Parents' lack of awareness about the importance of the transition process hinders their involvement	• Develop and provide support materials for parents on transitions • Offer multiple activities to increase parents' awareness of and participation in transitions
• Difficulties engaging parents from disadvantaged backgrounds in the transition	• Adapt support materials to the needs of immigrant parents and children • Develop innovative participatory activities to involve marginalised parents • Complement transition activities with parenting programmes
• Unequal relationships and poor understanding between ECEC staff and primary school teachers	• Develop initiatives to share child development information • Organise joint training • Create collaborative professional learning groups • Integrate both levels of education in the same location
• Limited co-operation with other child development services	• Establish working teams with professionals from different sectors

Challenge 1: Children's views are not fully accounted for when shaping policies and practices for transitions

Participating countries note that children are increasingly viewed as active participants in their own transition and learning. Research shows that transition activities prepared with the participation of children themselves help ensure the child understands and takes ownership of his or her own transition. Listening to children and their experiences helps to better understand

the challenges they face and to improve the support given by parents, preschools and schools. Some countries recognise the importance of children's participation in their curriculum frameworks (Denmark, Norway and Wales (United Kingdom)) and/or in their education acts (Finland, Norway and Sweden). Despite these efforts, children's participation in shaping transition practices is still limited. To foster children's participation, countries have specified the right of children to participate in education acts or curricula or research. In Finland, for example, accounting for children's views in shaping transition practices is taken seriously. Children are not only asked for their perspectives on how they are experiencing the transition, they also help produce knowledge, acting as researchers themselves.

Challenge 2: Parent's lack of awareness about the importance of the transition process hinders their involvement

Despite efforts to involve parents in supporting children's transition to school, countries report that there is still insufficient parental awareness of the importance of preparing children for their transit to school and of the powerful role parents can have during this stage. Attitudes and beliefs combined with this lack of awareness are likely to prevent parents from being active participants in children's transition. For example, parents commonly believe that the transition process is unproblematic and transition activities are hence taken for granted. Parents can benefit from greater awareness of what happens when children transit to primary school; the differences in the new learning environment; and why specific measures or activities are implemented. To tackle this challenge, countries have developed a number of strategies, including developing and providing support materials on transitions for parents (Australia, Austria, France and Wales (United Kingdom)); offering a range of activities to raise awareness of the importance of transitions (Austria, Finland, Slovenia, Sweden); and offering parents multiple opportunities to participate in transition activities (Japan and Germany).

Challenge 3: Difficulties engaging parents from disadvantaged backgrounds in the transition

Parental participation in transitions continues to be limited, especially by parents from disadvantaged groups. These include families with low socio-economic status, families of immigrant origin, indigenous families and families with children with special learning needs. Evidence suggests that opportunities to become familiar with the new learning environment are of particular importance for school adjustment by disadvantaged children (LoCasale-Crouch et al., 2008). Several participating countries report that it is particularly difficult and challenging to engage vulnerable children and their families. Participating countries have implemented a number of strategies to encourage parents from disadvantaged households to be involved in the transition process: adapting support materials to the needs of parents and children (Austria and Norway); developing new participatory activities to involve parents (Wales (United Kingdom) and New Zealand); or complementing transition activities with parenting programmes (Wales (United Kingdom) and Australia).

Challenge 4: Unequal relationships and poor understanding between early childhood education and care staff and primary school teachers

Collaboration between ECEC staff and primary school teachers is key for ensuring continuity in children's learning and development. The majority of countries report that both ECEC staff and primary school teachers collaborate in some way (e.g. sharing information on child development and children's experiences). However, they also report that there is still room for improvement as co-operation requires time and resources and places additional demands on staff (Lillejord et al., 2017). In addition, lack of understanding and awareness of the differences between ECEC and primary education often hamper collaboration between sectors. Strategies developed to foster collaboration across sectors include initiatives to share child development information (Austria, Slovenia, Norway and Wales); organising joint training (Austria and Japan); creating collaborative professional learning

groups (Slovenia and Japan); and integrating both levels of education in the same location (Austria and Scotland (United Kingdom)).

Challenge 5: Limited co-operation with other child development services

The objective of community service collaboration in transitions is to create coherence, continuity and progression in the development and learning of children. The type of community services involved vary, but can include school psychologists, school physicians, speech therapists, auxiliary teaching staff, native-language teachers, social workers and healthcare professionals. Although few countries signal challenges in this area, this does not mean that this type of co-operation is problem-free. It is likely that it suffers from similar hurdles as those faced by the co-operation between ECEC and primary schools, especially when professionals are housed in different ministries. Some countries have established working teams with professionals from different sectors to ensure parents, ECEC settings and schools receive support to ensure children are prepared for the start of school (Austria, Slovenia and New Zealand).

Table 1.5 An overview of early childhood education and care and primary school alignment indicators for smooth transitions

	References													
	Governance		Professional continuity						Pedagogical continuity				Developmental continuity	
	Expenditure per child	Monitoring transitions	Statutory salaries	Total teaching working time	Total other duties working time	Number of years of qualifications to enter the profession	Training transitions: pre-service education	Training transitions: professional development	Curriculum continuity	Regulated staff-child ratio	Regulated maximum group size	Average hours of participation in last year of ECEC and first year of primary education	ECEC staff – primary-school teacher collaboration sharing child development info	Parent-staff collaboration sharing child development info
	Ratio ¹	Occurrence ²	Ratio ¹	Ratio ¹	Ratio ¹	Ratio ¹	Occurrence ²	Occurrence ²	Alignment ³	Ratio ¹	Ratio ¹	Ratio ¹	Occurrence ²	Occurrence ²
Australia	1.59			1.01	1.02		1.00		aligned					
Austria	0.81	ECEC	1.00			1.25	both	both	not aligned or integrated	1.00	1.00	0.84	both	both
Belgium – Flemish Comm	0.76	none	1.00			1.00			not aligned or integrated				both	both
Canada ⁴		both											both	both
Chile	1.55	none	1.00	1.00	1.00	1.00	ECEC	none	aligned	0.33	1.00	1.00		ECEC
Colombia				0.80	1.27		both	both	aligned	0.83	0.83	1.00	both	both
Croatia		ECEC							integrated		0.82	0.53	ECEC	ECEC
Czech Republic	0.98	both	0.94	1.41	0.60	0.60	both	ECEC	not aligned or integrated	0.43	0.80			both
Denmark		primary	0.87	2.14	0.26	0.88			not aligned or integrated					
Estonia				2.13	0.31									both
Finland	1.23	none	0.75			0.60		none	aligned			0.97		
France	1.04		1.00	1.00	1.00	1.00								
Germany	1.13	none		1.85	0.29		both	primary	aligned				both	both
Greece		none	1.00	1.20		1.00	ECEC	ECEC	aligned	1.00	1.00	1.00	ECEC	ECEC
Hungary	0.93	both	0.94	1.94	0.47	0.75	both	both	not aligned or integrated	0.93	0.93	0.80	both	both
Iceland	1.10		0.91			1.00								
Ireland	0.82	none					primary		not aligned or integrated	0.48		0.68		
Israel			1.04	1.22	0.07	1.00								
Italy	0.74	none	1.00	1.24		1.00	both	none	integrated		1.00	1.06	both	both
Japan	0.71	both						both	aligned		1.00	1.27	ECEC	ECEC
Kazakhstan		none					ECEC	both	not aligned or integrated		1.00	0.89	both	both

Table 1.5 An overview of early childhood education and care and primary school alignment indicators for smooth transitions (continued)

	References													
	Governance		Professional continuity						Pedagogical continuity				Developmental continuity	
	Expenditure per child	Monitoring transitions	Statutory salaries	Total teaching working time	Total other duties working time	Number of years of qualifications to entry the profession	Training transitions: pre-service education	Training transitions: professional development	Curriculum continuity	Regulated staff-child ratio	Regulated maximum group size	Average hours of participation in last year of ECEC and first year of primary education	ECEC staff - primary-school teacher collaboration sharing child development info	Parent-staff collaboration sharing child development info
	Ratio ¹	Occurrence ²	Ratio ¹	Ratio ¹	Ratio ¹	Ratio ¹	Occurrence ²	Occurrence ²	Alignment ³	Ratio ¹	Ratio ¹	Ratio ¹	Occurrence ²	Occurrence ²
Korea	0.78		1.00	0.89	1.08	0.75								
Luxembourg	1.07	none	1.00	1.09		1.00	none	both	integrated	1.00		1.00	both	both
Mexico		none	1.00	0.67		1.00	none	none	aligned	0.63	0.63	1.00		
Netherlands	0.99	none	1.00	1.00	1.00	1.00			not aligned or integrated			1.00		
New Zealand	1.39	none					none	none	aligned			0.81	ECEC	both
Norway	1.11	none	0.92	2.03		0.75	both	none	not aligned or integrated			2.40	both	both
Poland	0.80	primary	1.00	1.83	0.76	1.00	both	both	integrated	1.00	1.00	1.25	both	both
Portugal	0.91	primary	1.00	1.27	0.92	1.00			aligned	0.96	0.96	1.18	both	
Slovak Republic	0.84	ECEC	0.96	1.34	0.62	0.80	both	both	not aligned or integrated	1.00	1.00		both	both
Slovenia	0.89	both	1.00	2.10		0.60	both	both	aligned		0.79		both	both
Spain	0.87	both	0.97	1.00	1.00	1.00	both	both	aligned	1.00	1.00	1.00		both
Sweden	1.20	both					both	both	integrated			0.90	ECEC	ECEC
Switzerland	0.34	both	1.00			1.00	both		integrated			0.89	both	both
Turkey	1.10	none		1.50	0.59		both	both	aligned	0.50	0.50	1.00	both	both
United Kingdom - Wales	0.82	primary							integrated	1.00	1.00	0.33		both
United States	0.91		0.98			1.00								
OECD average	0.98		0.97	1.29	0.71	0.92				0.81	0.90	0.99		

Notes:

1. The ratios presented here represent the value of the corresponding preschool indicator divided by the value of the primary school indicator. Hence, values higher than 1.00 mean that the indicator has a higher value in preschool than in primary school; a value equal to 1.00 means that the indicator has a similar value in both levels of education; and, values lower than 1.00 mean that the indicator has a lower value in preschool than in primary school.

2. The values presented here represent the occurrence of this practice in both ECEC and primary schools, in ECEC settings only, in primary schools only, or in none.

3. The values represented here indicate the level of alignment of the curriculum: aligned, integrated, or not aligned or integrated.

4. Canada: great variation across provinces.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016 and OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.

StatLink  <http://dx.doi.org/10.1787/888933495722>

Notes

1. Austria, Denmark, Finland, Japan, Norway, Slovenia, Sweden, Wales (United Kingdom) and Kazakhstan (partner country).
2. Table 1.5 also includes information from OECD countries that did not respond to the transitions questionnaire (Australia, Estonia, France, Iceland, Korea, New Zealand and the United States).
3. The Programme for International Student Assessment (PISA) is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students (for further details, consult www.oecd.org/pisa/aboutpisa).

References

- Ackesjö, H. (2013), "Children crossing borders: School visits as initial incorporation rites in transition to preschool class", *International Journal of Early Childhood* Vol. 45/3, pp. 387–410.
- Ahtola, A., et al., (2011), "Transition to formal schooling: Do transition practices matter for academic performance?", *Early Childhood Research Quarterly*, Vol. 26/3, pp. 295-302.
- AIHW (2009), *Australia's Welfare 2009*, Australian Institute of Health and Welfare, Canberra, www.aihw.gov.au/publication-detail/?id=6442468304.
- Arndt, A. K., et al. (2013), "Supporting and stimulating the learning of socioeconomically disadvantaged children perspectives of parents and educators in the transition from preschool to primary school", *European Early Childhood Education Research Journal*, Vol. 21/1, pp. 23-38.
- Barnett, W. S., and J. T. Hustedt (2005), "Head Start's lasting benefits", *Infants & Young Children*, Vol. 18/1, pp. 16-24.
- Bogard, K. and R. Tananishi (2005), "Pk-3: An aligned and coordinated approach to education for children 3 to 8 years old", *Social Policy Report*, XIX(III), pp. 1-24.
- Carter, A. S., et al., (2010), "Prevalence of DSM-IV disorder in a representative, healthy birth cohort at school entry: Sociodemographic risks and social adaptation", *Journal of the American Academy of Child & Adolescent Psychiatry*, Vol. 49/7, pp. 686-698.
- Currie, J. and D. Thomas (2000), "School quality and the longer-term effects of Head Start", *Journal of Human Resources*, Vol. 35/4, pp. 755-774.
- Currie J, and D. Thomas (1995), "Does Head Start make a difference?", *American Economic Review* Vol. 85/3, pp. 341-364.
- Dobbin, M. (2013), "Transition from ECE to primary school", sabbatical report, Rahotu School, Rahotu, www.educationalleaders.govt.nz/content/download/53042/441373/file/Margaret%20Dobbin%20Sabbatical%20Report%202013.pdf.
- Dockett, S., et al., (2011), "Facilitating children's transition to school from families with complex support needs", Research Institute for Professional Practice, Learning and Education, Charles Sturt University, Albury, Australia.
- Dockett, S. and B. Perry (2006), *Starting School: A Handbook for Early Childhood Educators*, Pademelon Press, Baulkham Hills, Australia.
- Dunlop, A.W. and Fabian, H. (2006), *Informing Transitions in the Early Years: Research, Policy and Practice*, Open University Press and McGraw Hill, Maidenhead, UK, pp. 107–119.
- Fabian, H. (2007), "Informing transitions", in Dunlop, A. W. and H. Fabian, (2007) (Eds.), *Informing Transitions in the Early Years: Research, Policy and Practice*, pp. 3-17.

- Fabian, H. and A-W. Dunlop (2006), "Outcomes of good practice in transition processes for children entering primary school", Background paper prepared for the Education for All Global Monitoring Report 2007, *Strong foundations: early childhood care and education*, UNESCO, Paris.
- García, E. (2015), "Inequalities at the starting gate: cognitive and noncognitive skills gaps between 2010–2011 kindergarten classmates", report, Economic Policy Institute, Washington, DC, www.epi.org/publication/inequalities-at-the-starting-gate-cognitive-and-noncognitive-gaps-in-the-2010-2011-kindergarten-class/.
- Hausken, E.G. and A.H. Rathbun (2002), "Adjustment to kindergarten: child, family, and kindergarten program factors", paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA, 1-5 April 2002, <http://files.eric.ed.gov/fulltext/ED463849.pdf>.
- Hirst, M., et al., (2011), *Transition to Primary School: A review of the literature*, Commonwealth of Australia, Canberra.
- ILO (International Labour Office) (2013), "ILO policy guidelines on the promotion of decent work for early childhood education personnel", Meeting of Experts on Policy Guidelines on the Promotion of Decent Work for Early Childhood Education Personnel, Geneva, 12–15 November 2013, International Labour Office, Sectoral Activities Department, Geneva.
- IOM (Institute of Medicine) and NRC (National Research Council) (2014), "The cost of inaction for young children globally: Workshop summary", Institute of Medicine and National Research Council, The National Academies Press, Washington, DC, <https://www.nap.edu/catalog/18845/the-cost-of-inaction-for-young-children-globally-workshop-summary>.
- Jindal-Snape, D. and D. Miller (2010), "Understanding transitions through self-esteem and resilience", in D. Jindal-Snape (ed.), *Educational Transitions: Moving stories from around the world*, Routledge research in education, Routledge, Abingdon.
- Kagan, L. S. (1991), "Moving from here to there: Rethinking continuity and transitions in early care and education", in: B. Spodek, and N. Saracho (Eds), *Issues in Early Childhood Curriculum. Yearbook in early childhood education*, Vol. 2, Teachers College Press, New York.
- Kagan, S. and K. Kauerz (2012), *Early Childhood Systems: Transforming Early Learning*, Teachers College Press, New York.
- Korpi, B.M. (2005), "The foundation for lifelong learning", *Children in Europe*, Vol. 9, pp.10-11.
- Lillejord, S., et al., (2017), *Transition from Kindergarten to School – A systematic review*, Knowledge Center for Education, Oslo.
- Litjens, I. and M. Taguma (2010), "Literature overview for the 7th meeting of the OECD Network on Early Childhood Education and Care", OECD, Paris.
- LoCasale-Crouch, J., et al., (2008), "Pre-kindergarten teachers' use of transition practices and children's adjustment to kindergarten", *Early Childhood Research Quarterly*, Vol. 23/1, pp. 124-139.
- Magnuson, K. A., C. Ruhm, and J. Waldfogel (2007), "The persistence of preschool effects: Do subsequent classroom experiences matter?", *Early Childhood Research Quarterly*, Vol. 22/1, pp. 18-38.
- Margetts, K. (2014), "Transition and adjustment to school" in *Transitions to school – International research, policy & practice*, Springer, Dordrecht.
- Margetts, K. (2007), "Understanding and supporting children: shaping transition practices", in Dunlop, A.-W. and H. Fabian (Eds.), *Informing Transitions in the Early Years: Research, Policy and Practice*. Open University Press and McGraw Hill, Maidenhead.

- Melhuish, E. (2014), "The impact of early childhood education and care on improved wellbeing", In: British Academy (eds), *If you Could Do One Thing...Nine local actions to reduce health inequalities*, British Academy, London, www.britac.ac.uk/publications/if-you-could-do-one-thing.
- Melhuish, E., et al. (2015), "A review of research on the effects of early childhood education and care (ECEC) on child development", CARE, <http://ecec-care.org/resources/publications/>.
- Neuman, M. (2007), "Professional continuity", in Moss, P. and M. Woodhead (2007), *Early Childhood and Primary Education, Early Childhood in Focus 2: Transitions in the Lives of Young Children*, Milton Keynes, Open University, pp. 58-59.
- OECD (2017a), OECD Family Database, OECD, Paris, www.oecd.org/els/family/database.htm.
- OECD (2017b), Online Education Database, OECD, Paris, www.oecd.org/education/database.htm.
- OECD (2016a), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.
- OECD (2016b), *Low-Performing Students: Why They Fall Behind and How to Help Them Succeed*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264250246-en>.
- OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264228368-en>.
- Peters, S. (2010), *Literature Review: Transition from Early Childhood Education to School*, University of Waikato, Hamilton, New Zealand.
- Pianta, R. C. and M. Kraft-Sayre (2003), *Successful Kindergarten Transition: Your Guide to Connecting Children, Families and Schools*, Paul H. Brookes Publishing Co., Illinois.
- Pramling, N. and I. Pramling Samuelsson (2011), *Educational Encounters: Nordic Studies in Early Childhood Didactics*, Springer, Dordrecht.
- Rimm-Kaufman, S. E. and R.C. Pianta. (2000), "An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research", *Journal of Applied Developmental Psychology*, Vol. 21, pp. 491-511.
- Sammons, P., et al., (2008), *Effective Pre-school and Primary Education 3-11 Project (EPPE 3-11): Influences on children's attainment and progress in Key Stage 2: Cognitive outcomes in Year 6*, Institute of Education, University of London, www.ucl.ac.uk/ioe/research/pdf/Effect_of_starting_pre-school_at_age_2_report.pdf.
- Schulting, A.B., P.S. Malone, and K.A. Dodge (2005), "The effect of school-based kindergarten transition policies and practices on child academic outcomes", *Developmental Psychology*, Vol. 41, pp. 860-871.
- Stipek, D., et al., (2017), "PK-3: what does it mean for instruction?", *Social Policy Report*, Vol. 30/2.
- Sylva, K., et al., (2004), *Effective Pre-school Provision*, Institute of Education, London.
- Tarrant, K. and S. Kagan (2010), "Integrating pedagogy, practice, and policy: A transition agenda", in: S. Kagan and K. Tarrant (Eds), *Transitions for Young Children: Creating connections across early childhood systems*, Brookes, Baltimore, Maryland, pp. 313-326.

- Vrinioti, K., J. Einarsdóttir, and S. Broström (2010), "Transitions from preschool to primary school", in: EU-Agency, Regional Government of Cologne/Germany (Eda), *Transition from Preschool to School: Emphasizing Early Literacy. Comments and Reflections by Researchers from Eight European Countries*, Early Years Transition Programme, EASE.
- Woessmann, L. (2008), "Efficiency and equity of European education and training policies", *International Tax and Public Finance*, Vol. 15/2, pp. 199-230.
- Woodhead, M. (1988), "When psychology informs public policy: The case of early childhood intervention", *American Psychologist*, Vol. 43/6, p. 443.
- Woodhead, M. and P. Moss (eds.) (2007), *Early Childhood and Primary Education. Early Childhood in Focus 2: Transitions in the Lives of Young Children*, Open University Press, Milton Keynes.
- Zhai, F., C. Raver and S.M. Jones (2012), "Academic performance of subsequent schools and impacts of early interventions: Evidence from a randomized controlled trial in Head Start settings", *Children and Youth Services Review*, Vol. 34/5, pp. 946-954.

Chapter 2

The organisation and governance of transitions from early childhood education and care to primary school

Understanding how the transition between early childhood education and care (ECEC) and primary education is organised and governed across the OECD is important to help policy makers ensure that the foundations laid in ECEC endure into primary education, promote a strong start in primary school and foster a more equitable early education system. This chapter provides an overview of transition systems across OECD and partner countries, focusing on trends in organisation and governance. It describes four main policy challenges for smooth transitions, accompanied by a wealth of practical strategies devised by participating countries for tackling them. Finally, it draws out some pointers for policy development to provide some food for thought on improving transitions.

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.

The data collected through the OECD questionnaire on transitions for Italy is published here under the responsibility of the National Institute of Evaluation of the Educational and Training System (INVALSI, Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione).

Key policy messages

Early childhood transitions are receiving greater political and social attention

- Policy documents, including education acts and curriculum frameworks, are placing greater emphasis on the need for smooth transitions. This is obliging local authorities, early childhood education and care (ECEC) settings and schools to implement appropriate policies and practices. *Country examples: Denmark, Finland and Norway.*
- Responsibilities for ECEC are increasingly integrated in the ministry of education, which facilitates collaboration between education levels and can strengthen coherence between ECEC and schools. *Country examples: Nordic countries and Slovenia.*
- Curricula are being redesigned so as to ensure continuity of children's learning from one stage to another. *Country examples: Japan, Ireland and Wales (United Kingdom).*
- Primary school starting ages are being lowered to give children a stronger start at school. This can have significant implications for transition programming. *Country examples: Slovenia and Kazakhstan.*

International comparisons reveal some clear trends

- Annual expenditure per child is lower for pre-primary education than primary education. This is true for two-thirds of participating countries.
- A large share of children experience more than one transition before they start primary school (in 50% of participating countries). Many children transition from childcare to pre-primary education and then to primary school.
- A separate transition class, year or group is available for children in over half of the participating countries in their last year of ECEC. In almost half of these, this phase is compulsory.
- Compulsory education can start as early as age three, though most children start compulsory education at six. The range is broad: from three (Hungary and Mexico) to seven years old (Sweden). Children's starting age at primary school is rarely delayed, and is usually done so for health or developmental reasons. Most countries favour remedial support over grade repetition for children in difficulty.
- Transition policies and practices differ widely, being mostly designed by ECEC settings and schools. National policy documents (such as national curriculum guidelines for both ECEC and primary school) or the monitoring of transitions as part of inspections, can support the quality of transition practices and ensure quality is more even across different settings or schools.
- Transitions are not commonly monitored separately; they are often included in broader quality monitoring. Parental surveys are the most common tool, followed by child monitoring methods (e.g. portfolios, child development reports or development assessments).

Countries have developed a wealth of strategies to address the organisational and governance challenges affecting transitions

Challenge 1. Lack of coherence across regions and settings

- Develop a national plan or strategy to improve coherence, e.g. Austria's ECEC-primary school project
- Develop national guides or guidelines, e.g. Norway's national guide, *From the Eldest to the Youngest*
- Develop local guides or guidelines, e.g. Denmark's local transition guidelines for settings

Challenge 2. Difficulty in engaging all actors

- Include transitions in laws or mandatory curriculum frameworks, e.g. Denmark's Act on Day Care and Norway's Framework Plan for the Content and Tasks of Kindergartens
- Share example transition initiatives with local governments and settings, e.g. the Japanese government's collection of transition examples
- Monitor the state of transitions, e.g. Japan's 5-step approach to monitoring municipality transition progress

...

Key policy messages (continued)

Challenge 3. Weak collaboration among stakeholders

- Review collaboration frequently, e.g. Sweden's self-evaluation form for preschools and primary schools
- Discuss transitions with key stakeholders regularly, e.g. consultative approach by Norway's Ministry of Education and Research and the Directorate for Education and Training
- Provide counselling and guidance, e.g. Slovenia's counselling service

Challenge 4. Inequity in transitions

- Provide language support, e.g. Denmark's language assessment for preschool children
- Set up financial support programmes, e.g. Wales' Pupil Deprivation Grant for ECEC
- Prioritise participation in ECEC for target groups, e.g. Slovenia's priority to kindergarten places for disadvantaged children
- Provide additional financial or human resources for ECEC settings, e.g. extra funding in Finland for deprived areas

Policy pointers for successfully governed and organised transitions

- View transitions through the lens of holistic early development approaches
- Address equity at all levels of education, not only transitions from ECEC to school
- Use sound evidence to inform transition policy decisions
- Promote strong leadership by municipalities
- Establish collaboration as the first step in creating continuity
- Align objectives of ECEC and schools

Introduction

The OECD Starting Strong reports (OECD, 2001; 2006; 2012) and international research point out that high-quality early childhood education and care (ECEC) benefits children's early development, their subsequent school performance, and even their outcomes later in life, including labour market participation and social integration. As discussed in detail in Chapter 1, a strong start in early education provides a crucial foundation for future learning and helps to develop the cognitive and social-emotional skills essential for future success (Elliott, 2006; Morrissey, Hutchison and Burgess, 2014; Ruhm and Waldfogel, 2011; Sammons et al., 2012; Sylva et al., 2004). At the same time, research has found that some of the positive effects of participation in ECEC can fade in primary school when transitions between ECEC and school are ill-prepared (Ahnert and Lamb, 2011; AIHW, 2009; Anders, 2013; Duncan and Magnuson, 2013; Elliott, 2006; Farrer et al. 2007). Low-quality transitions often affect children from disadvantaged backgrounds¹ more than their better-off peers (Isaacs, 2008; Melhuish et al., 2015).

Understanding how the transition between ECEC and primary education (Box 2.1) is organised across the OECD is important for policy makers to ensure that early years' policies ensure that ECEC benefits endure into primary education, promote a strong start in primary school and foster a more equitable (early) education system. In addition, a rich international knowledge base on how transitions can be strengthened to support children's development and well-being is important for policy design and implementation, as well as to inform educators and parents on the importance of transitions.

This chapter provides an overview of transition systems across OECD and partner countries, focusing on their organisation and governance. It draws on a literature review, in-depth country background reports by 8 OECD countries² and 1 partner country (Kazakhstan), and a questionnaire completed by 27 OECD countries and 3 partner countries (Colombia, Croatia and Kazakhstan) in 2015/2016 (see Annex A at the end of the report for details on the methodology).³ The chapter outlines

common challenges from the perspectives of participating countries and practical strategies they have devised for tackling them. Finally it draws out some pointers for policy development for strengthening transitions.

Box 2.1 Key definitions

Throughout this chapter the term **early childhood education and care** (ECEC) will be used to refer to regulated arrangements that provide education and care for children from birth to compulsory primary school age (**in integrated systems**), or from birth to pre-primary education in **split systems**. The International Standard Classification of Education (ISCED) is the reference classification for categorising education programmes and related qualifications by education levels and fields. The latest version (ISCED 2011) has nine levels of education, from level 0 to level 8, where **ISCED 0** refers to early childhood education and **ISCED 1** refers to primary education. Education programmes at ISCED level 0 are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02). The latter include ECEC centres that provide services for children to support early development in preparation for participation in school and society, and that accommodate children from age three to the start of primary education. The focus of this publication is on ISCED 02 and the terms pre-primary, preschool and ECEC are used interchangeably.

Note also that different countries have different ways of referring to programmes classified as ISCED 0. For example: early childhood education and development, playschool, reception, pre-primary, preschool, kindergarten, Kita, Krippe or *educación inicial*.

For more information, see the Glossary and OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, <http://dx.doi.org/10.1787/9789264228368-en>.

What are the goals and objectives of transitions from early childhood education and care to primary school?

Some countries set out policy goals specific to transitions; others tend to embed transitions in other policy goals. Among those who have specific goals on transitions, the scope and degree of specificity of the goals and objectives vary.

Broader goals tend to emphasise child well-being and support

Finland sets broad goals for transitions, such as promoting a sense of security and well-being and supporting their prerequisites for growth and learning. Successful transitions should ensure that each child's learning path is a flexible continuum founded on the needs of the child. Similarly, in Norway there is broad agreement that a good transition presupposes that both ECEC and school facilitate a holistic education that ensures the individual child's need for safety and continuity. The preparations for school must have a broad perspective and must be seen in connection with the child's surroundings, family, peers, preschool and school. Wales (United Kingdom) also sets broad goals for children: i.e. to ensure that all children and their parents experience practical and emotional support through all transitional stages to facilitate continuity in their care; support progression in their development and learning; enhance their well-being; and ensure that they have a positive experience of change.

These goals and objectives are rarely included in formal government documents. They are frequently mentioned in curricula, such as in Finland, Slovenia, Sweden, Norway and Wales (United Kingdom). In doing so, this obliges local authorities and ECEC facilities and schools to consider developing transition programmes. A few countries specify the broader goals of transitions in law, such as Denmark.

School readiness is a key goal in many countries, especially Anglophone countries

In some countries – such as Australia, Japan, the United Kingdom, the United States and Kazakhstan – the goals for transitions are driven by the school readiness policy narrative (see

Box 1.2 in Chapter 1). In Japan more than a decade ago, children who transited to primary school were not adapting and integrating well in the first year of compulsory elementary education (Box 2.2). As a consequence, the goal of kindergarten education was revised to account for the importance of transitions and it was defined as “to cultivate foundations for compulsory education and subsequent education”. In Kazakhstan, pre-primary education and the transition to school are increasingly focused on creating conditions for the development of competencies necessary for successful learning, and the development of creative and intellectual skills of a child. In the United States, school readiness gained attention when the National Education Goals (or “Goals 2000”) asserted that “all children in America will start school ready to learn” (National Education Goals Panel, 1998, p. 1). This goal was based on the belief that children’s success during the transition to formal schooling was strongly related to children’s abilities and skills at primary school entry (Meisels, 1999). Further attention to school readiness was given in the early 2000s with the inception of the federal No Child Left Behind Act. This law was enacted to tackle the pervasive achievement gap between children from advantaged and disadvantaged backgrounds at the start of compulsory schooling. Other countries, such as the Nordic countries for instance, focus more on the school being ready for the child (see Box 1.2 in Chapter 1).

Some countries embed transitions in other policy goals

In other countries, there are no clear goals or objectives for transitions, although programmes and initiatives exist to support transitions. This is the case in Austria and Denmark, where different authorities are responsible for ECEC and primary school and the concept of transition is developed at the local- or setting- level only. As a result, no explicit cross-regional transition strategies or programmes exist, although there are more general goals for early learning across the country. For example, the stimulation of language development is one of Austria’s main country-wide policy interventions to prepare children for their future education and employment opportunities. In 2008, the government and the federal states ratified an agreement to make early language learning support mandatory. Transition is embedded in this strategy as its timing coincides with this critical stage of the language development.

What are the trends in organising and governing transition systems?

Transition is receiving greater attention

Early education systems (including transitions) differ between countries. These differences are shaped by the political and social context, and the societal values of each country. Overall, however, the political and social attention on early learning and the transition to primary schooling has increased in recent years in many countries. This is not only because the topics of lifelong learning and child-centred approaches have gained importance internationally (Chapter 1), but also because research finding that the benefits of early education can fade out in primary schooling has drawn attention to the subject. In addition, countries are experiencing challenges in organising high-quality transitions. In Japan, as in many other countries, transitions are receiving increased attention because children do not integrate well into primary school (Box 2.2).

Several trends in transitions can be analysed based on country’s policy changes over the last years. The surge in political interest in transitions is reflected in the inclusion of transitions in government policy documents and curricula framework. In some countries, there have been changes in national-level responsibilities for ECEC and primary education to better align ECEC and primary school. In other countries, primary school age has been lowered to support children’s transition to primary school, while in still others the various ECEC and primary schooling settings have been integrated to reduce the number of transitions for children.

Box 2.2 Case study: The issue of first graders in primary school in Japan

More than a decade ago, Japan experienced the so-called “first grader problem”: children transitioning to primary school were not adapting and integrating well in their first year of compulsory education. This issue increased the awareness in Japan of the importance of a good transition to primary school and resulted in a revision of the School Education Act in 2006. This included a revised objective for ECEC and changes to the curriculum for kindergartens (the Course of Study for Kindergartens) and other official guidelines for ECEC to reflect the importance of transitions. As a result, the topic of transitions received increased political attention at local level as well.

In response to a report on transitioning between kindergarten and primary school published by the consultative council for research and study of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2010, local governments nationwide have continued to promote collaboration between ECEC and primary schools. The development of transition curricula is encouraged throughout Japan. MEXT has held meetings for responsible supervisors and others on the boards of education in each prefecture and some cities with the purpose to strengthen transitions in these regions and cities. These meetings consist of, for instance, presentations by local governments on their policy initiatives for transitions.

Sources: OECD Network on ECEC, “Survey on transitions between ECEC and primary education”, June 2016; Government of Japan (2016), *Japan Country Background Report on Transitions*, Government of Japan, Tokyo, www.oecd.org/edu/school/SS5-country-background-report-japan.pdf.

Transitions are increasingly included in government strategies and policy documents

In Austria the early years are now considered an indispensable part of education and human development. The topic of transition has become an integral part of the *Austrian Strategy for Lifelong Learning LLL:2020* (Republik Österreich, 2011), reflecting government commitment to the early years. The strategy aims to strengthen ECEC as a lasting foundation for development, and to prepare children for their educational career, thereby ensuring a continued process of education.

In Norway, the increased interest in transitions is revealed in a variety of reports and white papers. The 2008 White Paper *Quality in Kindergartens* includes a chapter on transition and coherence between kindergarten and school. The 2016 White Paper *Time for Play and Learning* also addresses the topic, mentioning the importance of coherence for children in transitions between ECEC and school. This has fed into Norway’s revised curriculum framework, to be implemented in August 2017. The new framework states that the kindergarten shall support children in acquiring experiences, knowledge and skills that provide them with a solid foundation and motivation for starting school. Kindergartens are required to support children in rounding off the time in ECEC in a good way and to be able to meet school with curiosity and confidence in themselves and their abilities.

In Denmark, political attention to transitions was enhanced with the introduction of the independent *Act on Day Care* (2007), which emphasised that one of the purposes of ECEC is to create better coherence between the various levels of education. The introduction of a pedagogical curriculum for ECEC (2004) and the establishment of a more education-oriented focus in kindergarten class (2003) also contributed to the awareness of the importance of good transitions. Making kindergarten class compulsory for all children in 2009 further increased awareness of the need to improve transitions for young children.

In Finland, the National Board of Education published a position statement on transitions in 2011: *How to make the start in school successful* (Opetushallitus Utbildningsstyrelsen, 2011). Due to this position statement and the international research findings it reflects, political attention to transitions has increased. The government has become more aware of the complexity of transitions and this has since been reflected in the education acts and curriculum documents (Box 2.3).

Japan’s philosophy of education is based on continuity and coherence. These are reflected in the goals set out for ECEC and school. According to Japan’s Basic Act on Education, which was extensively revised in 2006, the objective of early childhood education and care is to build the foundations for the lifelong formation of one’s character. The objective of compulsory education is then to build foundations

for an independent life within society, while developing the abilities of each individual, and to foster the basic qualities necessary to form a state and society. ECEC is regarded as a “period of awakening learning”, while school is a “period of self-conscious learning”: these flow seamlessly into one another.

On the other hand, although in Slovenia transitions topped their policy agenda in the 1990s, political enthusiasm has since waned. In the 1990s, curricular reform and the lowering of the school entry age from seven to six years ensured that transition became a well-discussed subject. Particular attention was given to adapting the curriculum to include six-year-olds, how to align this curriculum with ECEC, and how to better align the training of ECEC and primary school staff. In addition, high public spending on new or expanding schools instigated interest in transitions.

Box 2.3 Case study: The integration of transitions into Finland's curricula

The “spirit” of Finland’s Act on Basic Education is the smoothing of children’s path to school. The specific goals for ECEC, primary education and the transition between them are depicted in the new core curricula for pre-primary and basic (primary) education. These revised versions emphasise more strongly the importance of good transitions than previous versions.

The revised National Core Curriculum for Pre-Primary Education (2014) drafted by the Finnish National Board of Education now states that “It is important that early childhood education and care, of which pre-primary education is a part, and basic education form an entity that proceeds consistently in terms of the child’s growth and learning. The starting point for a high-quality entity is that teachers and other personnel are familiar with the different phases of the learning path, the objectives central to these phases, and their characteristics and practices. The goal is that each child’s learning path from early childhood education and care to pre-primary education and further on to basic education is a flexible continuum founded on the needs of the child” (Finnish National Board of Education, 2016a). In addition, the curriculum also highlights that “...the transitions from home or early childhood education and care attended by the child before his/her start in pre-primary education, and from pre-primary education to school, are important phases for children. A successful transition promotes a sense of security and well-being in children and supports their prerequisites for growth and learning” (Finnish National Board of Education, 2016a).

The revised National Core Curriculum for Basic Education (2014) includes similar goals to ensure that ECEC, pre-primary school, and primary school staff have common objectives for the start of primary school and transitions between different settings (Finnish National Board of Education, 2016b).

In 2015, pre-primary education for six-year olds became compulsory in Finland and the curriculum for ECEC underwent further changes. A revised version of the ECEC curriculum was launched in October 2016 and will be implemented by the municipalities and the private sector in 2017.

Sources: sources for curricula documents are given in Table 4.A.7, Chapter 4; OECD Network on ECEC, “Survey on transitions between ECEC and primary education”, June 2016; Finnish Ministry of Education and Culture (2016), *Finland Country Background Report on Transitions from ECEC to Primary School*, Department for General Education and Early Childhood Education, Helsinki, www.oecd.org/edu/school/SS5-country-background-report-finland.pdf.

Governance changes are strengthening coherence between early childhood education and care and school

Other major changes have included new ways of governing ECEC. Placing the responsibility for ECEC and primary education under one ministry, as is the case in most countries with an integrated ECEC system – such as the Nordic countries and Slovenia – can strengthen coherence between ECEC and schools. In Norway, national responsibility for ECEC was transferred from the Ministry of Children, Equality and Social Inclusion⁴ to the Ministry of Education and Research in 2005. In 2012, the Norwegian Directorate for Education and Training, which is the executive agency for the ministry, also delegated some of the responsibility for kindergartens in order to strengthen coherence between different levels of education, including ECEC and school. Norway has also seen debates on other topics affecting transitions, such as on making the final year of ECEC compulsory, revising the content of the final year of ECEC, documenting and mapping children’s learning and development in ECEC, and on the kind of documentation on the child that should be transferred from ECEC to school.

Curriculum revisions have been implemented to strengthen transitions⁵

Japan has revised its kindergarten curriculum to give a stronger emphasis to transitions (Box 2.2). Similarly, the curriculum for primary education, the Course of Study for Elementary Schools, has addressed the topic of transitions since 2011. And as of 2015, the Course of Study and Guidelines for Day Care for Integrated Centres for Early Childhood Education and Care also pays attention to transitions. The curricula now prescribe that educational settings must be mindful of each other when it comes to transitions. For example, the Course of Study for Elementary Schools indicates that schools should align the content of the first-year subjects with the content of kindergarten education. To stimulate the alignment of content, local governments encourage the development of local curricula that are based on the national curricula, but that pay attention to local needs and to the topic of transitions for the beginning of primary school and for ECEC.

Wales plans for a more integrated curriculum as part of a wide-ranging education reform, as set out by Professor Graham Donaldson in his report *Successful Futures* and by Professor John Furlong in his report *Teaching Tomorrow's Teachers* (Donaldson, 2015; Furlong, 2015). This reform will include changes to initial teaching training, workforce development and the curriculum and assessment arrangements. The new curriculum and assessment arrangements will provide a more coherent curriculum programme and a clearer line of sight for progression for 3 to 16 year olds. This contrasts with the existing curriculum, which is organised into phases.

Austria has also implemented a range of curriculum changes to improve transitions. In the 2009 framework for ECEC services developed by the Charlotte Bühler Institut, the curriculum devotes considerable attention to the topic of transition (Charlotte Bühler Institut et al., 2009). This was followed in 2010 by the development of a special module for five-year-olds, the “Addition to the Austrian Framework Curriculum”, to support children in the final year of ECEC (Charlotte Bühler Institut et al., 2010).

In Ireland, both the quality framework for early childhood (Siolta), as well as the National Curriculum Framework (Aistear) for children from birth until six years, devote considerable attention to transitions. They provide numerous resources and strategies to promote successful and effective transitions in an online self-evaluation tool for ECEC settings. In addition, plans for a national transition initiative will improve how children’s development information is shared between ECEC and primary school. Transition templates are already being piloted. The initiative will also include the establishment of local networks, the dissemination of information to families, reciprocal visits by primary and preschool staff and children to schools and preschools and the development of materials and books to support children during the transition process.

Sweden’s main policy change for transitions has been to revise the ECEC curriculum in 2010. While this curriculum leaves much room for play and care, it puts more emphasis on children’s learning and preschool teachers’ education in more school-oriented areas. This indicates that ECEC and primary school are seeking ways to become more aligned.

In Kazakhstan, a specific curriculum for five and six-year-olds (*Biz mektepke baramyz*) was developed in 2009, improving the alignment between ECEC and primary education curricula. In the near future, the standards for preschool education will be revised to reflect the importance of transitions between ECEC and primary education.

The school starting age has been lowered in a number of countries

Research suggests that an early start in high-quality early education and care can be beneficial for children’s development (see Chapter 6). As a result, Kazakhstan made one year of pre-primary education compulsory for all five to six-year-olds to stimulate an early start in preschool education for all children. Other countries, such as Slovenia, have lowered the age at which formal schooling

starts. But the research remains rather inconclusive on whether starting formal schooling earlier has positive effects for children's development. While the research indicates that good quality ECEC can have beneficial impacts for young children (see Chapter 5), there is no research evidence to support the idea of starting school earlier. On the contrary, a large body of evidence indicates the crucial importance of child-led free play in young children's development (Gordon et al., 2003; Gray, 2009, 2012; Pellegrini, Dupuis and Smith, 2007; Pellis and Pellis, 2009; Whitebread and Jameson, 2010). Studies in New Zealand comparing children who began formal literacy instruction at age 5 or age 7 have shown that by the age of 11 there was no difference in reading ability level between the two groups, but the children who started at five developed less positive attitudes to reading, and showed poorer text comprehension than those children who had started later (Suggate, Schaugency and Reese, 2012). An early start in high-quality ECEC where play-based learning is fundamental, is found to have better outcomes than a more academically oriented programme. Marcon (2002), for example, demonstrated that, by the end of their sixth year in school, children whose preschool model had been academically-directed achieved significantly lower marks than children who had attended child-initiated, play-based preschool programmes. In the United Kingdom and Poland, for instance, the formal school starting age has been a topic of debate for some time now (Whitebread and Jarvis, 2015).

Slovenia's major changes in ECEC and primary education policies go back to the 1990s, following independence in 1991, which prompted the transition to a new constitutional and political system. Public services, including the education system, were reformed. The conceptual changes to the education system, including its main principles and theoretical framework, were presented in the White Paper on Education in the Republic of Slovenia (1995). The resulting new education legislation implemented numerous changes to organisation, goals, content, planning and practices, as well to the role of teachers and pupils. These reforms encompassed early childhood education and care (for ages one to six), primary and secondary education, as well as adult education. One of the largest changes included extending the length of compulsory schooling from eight to nine years by starting compulsory primary education at the age of six instead of seven. Lowering the school entry age had strong implications for transition and school programming as the schools' curriculum had to be adapted to the development level of younger children. As a result, new curricula were developed for all the subjects in the first year of primary education. These reflected the developmental characteristics of six-year-olds and included an age-appropriate pedagogy. In 2011, a new White Paper on Education was presented which introduced new subject areas to better prepare children to be part of future society, and which updated minimum standards.

Kazakhstan also lowered the school starting age in 1999, making pre-primary education compulsory and free for all five to six-year-olds. The main purpose was to improve children's school readiness and contribute to the more successful development of skills. The introduction of compulsory pre-primary education was also believed to improve continuity between ECEC and primary education as children are more used to a form of early education before starting primary school and the change from home to school will be less if children have already attended one year of pre-primary education.

Settings have been integrated to ease transitions

In a range of countries, such as Austria, various settings have been integrated to limit the number of transitions for children. For instance, the different ECEC settings, such as childcare and pre-primary education, may be integrated. Or pre-primary education settings and primary schools can be on the same premises so children do not have to move to a different location when starting primary school.

However, while sharing a location is not a problem, research indicates that when pre-primary education and primary school practices and curricula become too integrated, there is a risk of "schoolification" (Moss, 2013; and Box 1.2 in Chapter 1). This can blur the boundaries between early childhood education and the more formal primary education (Dahlberg and Lenz-Taguchi, 1994;

Moss, 2013). Several countries have avoided this by physically integrating pre-primary education and primary school on the same premises or providing them in the same building, while continuing to separate the two educational levels with each having different pedagogical approaches and/or curriculum frameworks.

In Austria, the last year of ECEC and the first two years of primary school will form a new “joint school-entry phase”. This new, three-year transition phase creates a structure for co-operation. It will ensure that important knowledge gained in ECEC is not lost, but instead used to facilitate integration into primary school.

In Japan, settings for early childhood education and care that function as both nursery centre and kindergarten were introduced in 2006 to provide integrated ECEC. Children participating in these integrated settings experience fewer transitions than those transiting from childcare to kindergarten and then on to school.

Research into transitions is also increasing

Increased political attention to transitions is also prompting greater research interest. Finland and Denmark's political changes, for instance, have resulted in a higher number of research studies on the topic. Likewise, Ireland's Literacy and Numeracy for Learning and Life Strategy 2011-2020 has increased attention on the funding of research into transitions (Department of Education and Skills, 2011).

Finland has seen more studies of vertical and horizontal transitions (for definitions see Box 1.1 in Chapter 1), as well as research into adults' views on and practices for transitions. The child is increasingly studied from the perspectives of development and adaptation, and more recent research puts the child at the centre. Additionally, instead of reviewing the risk factors, school transitions are now studied from the standpoint of their opportunities for growth, development and well-being.

The greater political focus on transitions in Denmark is reflected in two government-funded research projects into transitions for children from disadvantaged socio-economic backgrounds. This stems from findings that such children lack the competences required for a successful transition and that these delays remain during their primary school career.

How do countries organise early childhood education and care transitions?

Data on the organisation of transitions were collected through the “Survey on transitions between ECEC and primary education”, sent to the OECD ECEC Network in 2015. In addition, data from Education at a Glance 2015 and 2016 are drawn on as needed (OECD, 2015; 2016; see Annex A). This section summarises the main trends emerging from the data analysis.

Table 2.1 summarises how the countries participating in this study organise ECEC and primary education. This includes the types of institutions children commonly attend by age, and whether the settings provide mainly childcare, early education, a combination of childcare and early education, or primary education (see Box 2.1). It also shows the ages at which children start compulsory ECEC when ECEC is compulsory, and primary school. Overall, the table provides an overview of the early education path children may follow, by country. It also visualises the transitions children experience between ECEC and primary education.

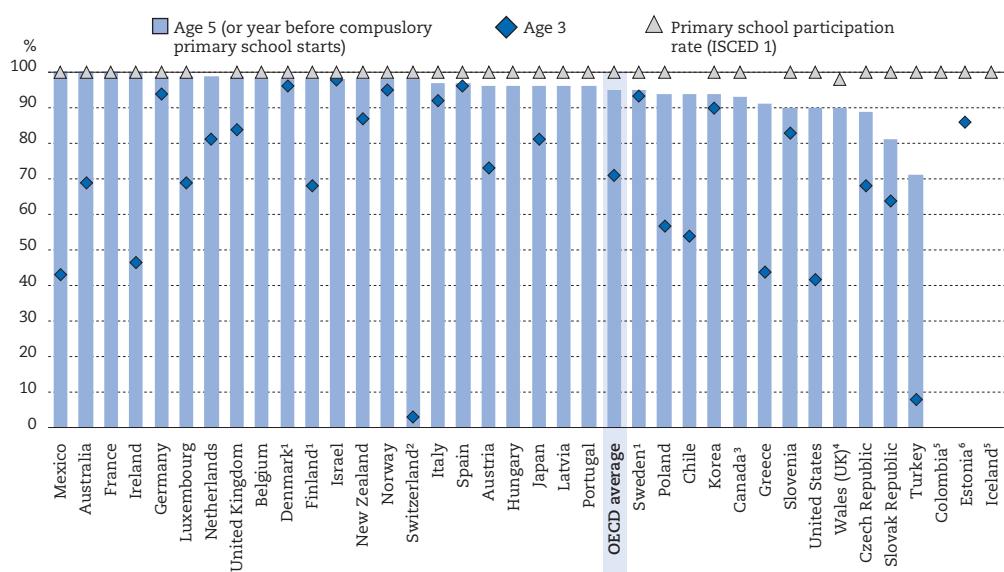
Almost all children participate in early childhood education and care before starting primary school

Although pre-primary enrolment rates are lower than for compulsory primary education (Figure 2.1), they have increased over time in almost all OECD countries (Figure 2.2). On average

across the OECD, 71% of all three-year-olds attend some form of ECEC, although there are large variations among countries. In France for example, all children aged three were in pre-primary education in 2014, while the figure for Turkey was only 8%. On average in 2014, 94.2% of all children who started primary education had attended ECEC the year before (Figure 2.2).

Figure 2.1 Pre-primary enrolment rates are still lower than for primary education (2014)

Enrolment rates at age three in ECEC, five in ECEC and primary education, and all ages in primary education (ISCED 1)



Notes:

Year of reference for data for enrolment in ISCED 1 is 2013.

Data for enrolment rates at age 3 refer to enrolment in all forms of ECEC (ISCED 0), including early childhood developmental programmes (ISCED 01) and pre-primary education (ISCED 02).

Data for enrolment rates at age 5 include all forms of ECEC, i.e. ISCED 0 (pre-primary education and childcare) as well as enrolment in primary school (ISCED 1).

Data for enrolment in primary education refer to enrolment in ISCED 1 in public and private settings.

1. For Denmark, Finland and Sweden, data for age 5 include data for children aged 6 as primary school starts at the age of 7 in both countries.

2. For Switzerland, data for 3-year-olds refer to enrolment in ISCED 02 only.

3. Year of reference for Canada is 2013 instead of 2014 for enrolment rates at ages 3 and 5 years; and 2012 for enrolment in primary education instead of 2013.

4. For Wales (UK), data for 5-year-olds refer to enrolment in ISCED 02 only.

5. Data are missing for enrolment rates at age 3 and 5 for Colombia and Iceland.

6. Data are missing for enrolment rates at age 5 in Estonia.

Data by country can be found in Annex 2.A, Table 2.A.3

Source: For ages 3 and 5 years: Table C2.1, OECD (2016), *Education at a Glance 2016: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2016-en>; for primary education: Table C1.4, OECD (2015a), *Education at a Glance 2015: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2015-en>.

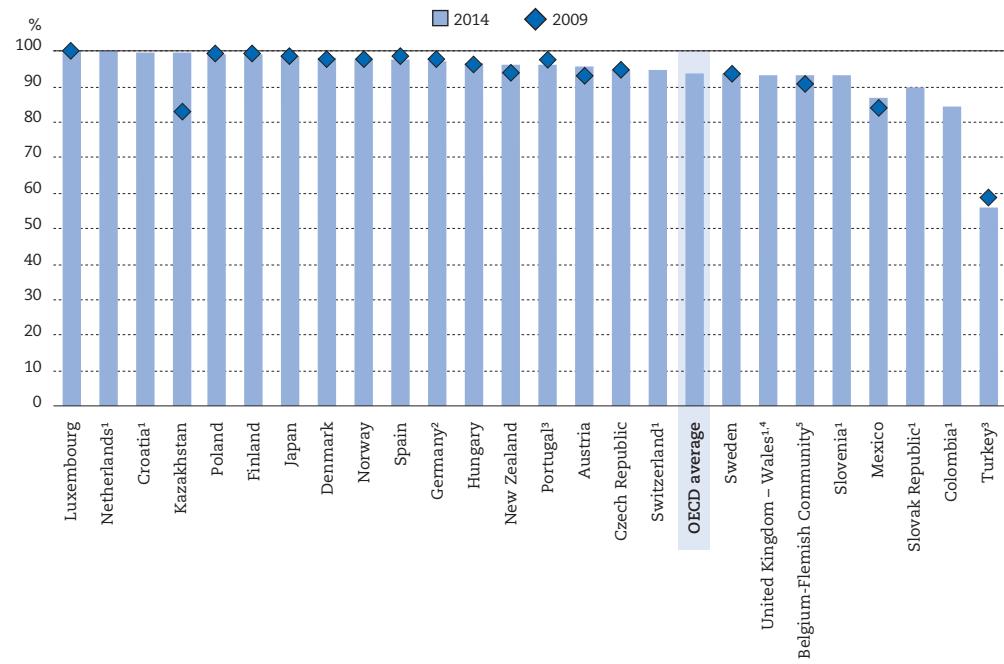
StatLink <http://dx.doi.org/10.1787/888933495403>

In some countries – such as Chile, Poland and Finland – compulsory education starts in ECEC, which means that all children attend some form of ECEC before they enrol in school. In other countries enrolment in pre-primary education (kindergarten) before the start of primary school (see Table 2.3) is not compulsory but is still very common. For example, in the Netherlands pre-primary education is free for all children from the age of four in public settings. Kazakhstan's ECEC participation rate has benefitted from government financial support as well as the lowering of the compulsory education start age (see above). Whereas 83% of all pupils who started primary education in 2009 had attended preschool the year before, this had increased to nearly 100% by 2014.

In Turkey and Colombia, it is less common for children to have benefitted from some form of ECEC before primary school. This may be because there are insufficient places available in ECEC or because families are unable to travel to the nearest ECEC setting. It could also be related to lack of awareness by parents of the importance of ECEC or the limited coverage of early learning settings.

Figure 2.2 The share of children participating in early childhood education and care is increasing (2009 and 2014)

Share of children in first year of primary school who participated in ECEC the previous year, 2009 and 2014



Notes: Information on “Share of children in first year of primary school who participated in ECEC the year before” is based on 25 countries. Countries are ranked in descending order for enrolment rates in 2014. The OECD average refers to the average of the countries included in this figure only.

1. For the Netherlands, Croatia, Switzerland, Wales (UK), Slovenia, the Slovak Republic and Colombia there are no data for 2009.

2. For Germany, years of reference are 2013 instead of 2014 and 2010 instead of 2009.

3. For Portugal and Turkey, the year of reference is 2012 instead of 2009.

4. For Wales, the figure for 2014 is an estimate provided by the Welsh Government of between 90 and 97.5% children starting primary school who attended ECEC the year before.

5. For Belgium (Flemish Community), the year of reference is 2010 instead of 2009.

Data by country can be found in Annex 2.A, Table 2.A.4.

Source: OECD Network on ECEC, “Survey on transitions between ECEC and primary education”, June 2016.

StatLink <http://dx.doi.org/10.1787/888933495411>

Children in half the countries experience two transitions between early childhood education and care and primary school

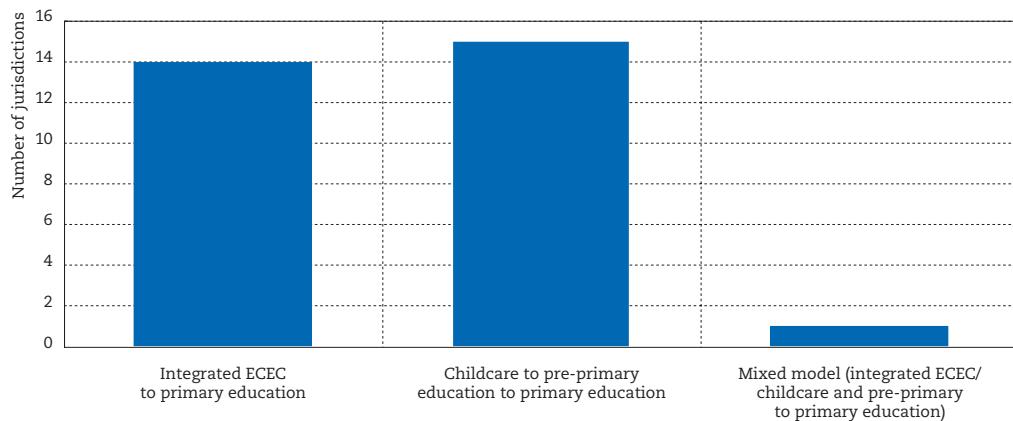
The fact that almost all children across the OECD attend some form of ECEC means that almost all children are experiencing a first transition from home to ECEC, followed by a second transition between ECEC and primary school. In addition, a large number of children have another, intermediate, transition to make before they reach primary school: from childcare (ISCED 01) to pre-primary education (ISCED 02). Some children may even transit from a pre-primary education provider or school to after-school care. In Sweden, for example, in the course of just over one year, children may experience two transitions between three types of school: from ECEC to preschool class (the separate transition year between ECEC and primary school), and then to compulsory school. A horizontal transition is added when starting in preschool class, when many children also begin to attend a recreation centre.⁶

In 15 of the 30 jurisdictions for which data are available (listed under Figure 2.3 and on Table 2.A.1), children have to make the transition from childcare to pre-primary education, and then from pre-primary education to primary school (Figure 2.1). This is the case in, for instance, the Flemish Community of Belgium, Switzerland and all Canadian provinces and territories (Table 2.1 and Table 2.A.1). In a few jurisdictions, preschool is integrated into primary school. In the

Netherlands for example, children start in childcare, and continue preschool education in primary school, after which they start first grade. In 47% of jurisdictions (14 out of 30), ECEC provision is integrated, meaning that there is no division between childcare and pre-primary education – ECEC is provided to the whole age range and children transit from an integrated ECEC setting to primary school. These integrated forms of ECEC mean that children experience fewer transitions.

Japan is an exception: children can either transit from an integrated ECEC setting to primary school, or they can start ECEC in childcare, move to a preschool and then start primary education. Japan is therefore shown as a mixed model in Figure 2.3.

Figure 2.3 The majority of children experience at least two transitions before primary school (2016)



Note:

Information on “Organisation of transitions between ECEC and primary school” is based on 30 countries.

Based on data for the following 30 countries: Austria, Flemish Community of Belgium, Canada, Chile, Colombia, Croatia, Czech Republic, Denmark, Finland, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and Wales (United Kingdom).

Data by country can be found in Annex 2.A, Table 2.A.1.

Source: OECD Network on ECEC, “Survey on transitions between ECEC and primary education”, June 2016.

StatLink <http://dx.doi.org/10.1787/888933495429>

As mentioned by a few countries, such as Denmark and Sweden, transitions are more complex than 10 or 15 years ago. Nowadays not all children in an ECEC setting or preschool class attend the same primary school afterwards. This means that ensuring smooth transitions requires collaboration among several ECEC settings, preschool classes and primary schools, as arranging visits by children to all the future primary schools may not be feasible. How such collaboration is established and how to ensure transitions between these different settings is further discussed in Chapter 5.

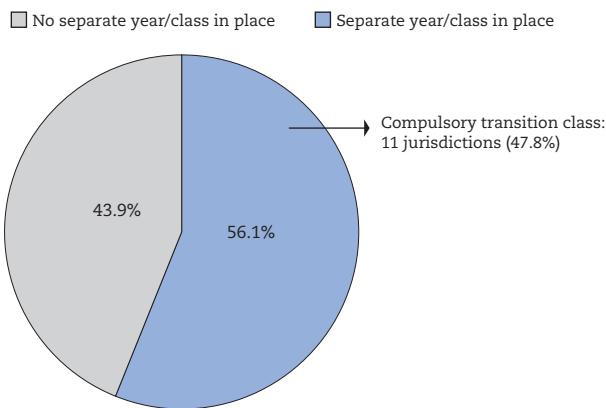
Transition classes are common

Some countries organise a separate year, class or group for children in their final year of ECEC or the year before children start primary school. Data derived from the 41 jurisdictions that responded to this part of the questionnaire⁷ find that over half (56.1% or 23 jurisdictions) have a separate transition year or a separate group, class or year in ECEC for children the year before they enter mandatory primary schooling (Figure 2.4). In 47.8% of these jurisdictions (11 out of 23⁸), this is a compulsory year or class.

In Sweden for instance, children start compulsory primary school at seven and there is a separate preschool class for six-year-olds to ease the transition between ECEC and school. In other countries the group or class for children’s last year before compulsory primary education is not as clearly separated from ECEC and primary education. This is the case in Sweden and also the Netherlands.

In the latter, five-year-olds are in *groep 2* before entering grade 1 in compulsory school and in *groep 1* when they are four years old. Both *groeps* are part of the primary school. In ten of the Canadian provinces and territories, children can participate in an optional kindergarten during the year before compulsory primary education. In the other three provinces, the kindergarten or “Grade Primary” year is part of compulsory primary education (Table 2.1).

Figure 2.4 More than half the countries offer a separate year or class/group the year before compulsory primary school (2016)



Notes:

Information on “Separate year or class/group in place for children the year before compulsory primary school” is based on 41 jurisdictions. Based on data for the 41 jurisdictions: Austria, Flemish Community of Belgium, Alberta (Canada), British Columbia (Canada), Manitoba (Canada), New Brunswick (Canada), Newfoundland and Labrador (Canada), Northwest Territories (Canada), Nova Scotia (Canada), Nunavut (Canada), Ontario (Canada), Prince Edward Island (Canada), Québec (Canada), Saskatchewan (Canada), Yukon (Canada), Chile, Colombia, Croatia, Czech Republic, Denmark, Finland, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and Wales (United Kingdom). Germany is excluded from this figure as some Länder have a separate group or class and others do not. Hence, both options are possible.

Data by country can be found in Annex 2.A, Table 2.A.2.

Source: OECD Network on ECEC, “Survey on transitions between ECEC and primary education”, June 2016.

StatLink <http://dx.doi.org/10.1787/888933495432>

In most countries, pre-primary education is on the same premises as the primary school

While children may experience several ECEC transitions before they start school, these do not necessarily involve a physical move from one place to another. In the majority of jurisdictions (56.7% or 17 out of 30 jurisdictions⁹, pre-primary education is provided in the same building or on the same premises as the primary school (Table 2.2). This may soften the transition to school as children usually do not have to change building and are already familiar with the space and rooms, as well as with the staff. Moreover, the monitoring of child development may become more continuous as information can more easily be shared and methodologies more easily aligned. The topics of professional and pedagogical continuity are addressed in more depth in Chapters 3 and 4 respectively.

In Slovenia, there is no clear trend for the integration of ECEC settings and schools: just over half of all integrated preschool education settings are at the same location or in the same building as primary schools. For example, about one-quarter of Slovenian children attending ECEC do so in a kindergarten that is located in a school. Primary school in Slovenia is also integrated with lower secondary education, so children experience fewer transitions as the different levels of education are provided at the same location.

The Danish public school (*Folkeskole*) also covers both primary and lower secondary education, with the first stage of basic (primary) education including kindergarten class followed by grade 1

to 6, and second stage basic education including grade 7 to grade 9/10. Hence, Folkeskole provides education to pupils between the ages of 6 and 16/17 years.

In 15 jurisdictions (36.6%), ECEC and elementary schooling remain separate. In countries where pre-primary education is provided but some form of childcare is available too, childcare is usually not provided at primary schools. Norway and Finland keep ECEC and school mostly separate, although 20% of Finland's Esiopetus (pre-primary classes) are within primary schools. In Sweden it is common to have preschool class for six-year olds on the same premises as schools.

There can be some drawbacks in providing pre-primary education on the same premises, however. In Slovenia for example, since the counselling service in integrated settings is shared, counselling services felt that problems experienced by the school were treated as "more important" than problems experienced by the ECEC setting. Hence, they felt they were less able to provide their duties in giving advice and support to preschools. In addition, the preschool setting is often found to be less relevant or is even overlooked in self-evaluations when the two settings are integrated (Taštanoska, 2015).

Compulsory education does not always begin in primary school

The age at which compulsory education should begin is a topic of debate in OECD countries. Norway has had some discussion on whether compulsory education should start the year before primary school (which starts at six), i.e. whether it should make the final year of ECEC compulsory. The Norwegian Brenna Committee recommended keeping ECEC voluntary (NOU, 2010). One of the reasons was the lack of sufficient pedagogical staff in 2010.

This is also a topic of political interest in Sweden. A recent debate focused on whether preschool class should be made mandatory while remaining an independent form of education, or be replaced by a mandatory 10-year compulsory school starting at the age of six instead of seven. A commissioned report presented to the Swedish government in September 2015 recommended making the preschool class mandatory from the autumn of 2017 (SOU, 2015). At the time of writing, this was being considered by the government.

There is also some debate in Denmark over when children should start school. Several municipalities start school education in the spring instead of the usual primary school starting time of August. Children who start school in the spring usually do so in an after-school setting until August, when they can start actual primary school. But there are no curricular requirements for after-school settings and there is a risk that quality varies greatly between settings for this reason.

In most countries, compulsory education starts at the age of six, from the first year of primary school (Table 2.3). However, in some countries, compulsory education starts one year before the start of primary school, at the age of five; this is the case for Chile,¹⁰ Colombia, Croatia, Greece, and the Netherlands. In a few cases, compulsory education starts earlier, at the age of four (Luxembourg and Switzerland) and even at three (Hungary and Mexico). On the other hand, in a few countries, primary education does not start until seven (Finland, Kazakhstan, Poland and Sweden), although education is compulsory from the age of six (except in Sweden) (see Tables 2.1 and 2.3).

In countries with an early compulsory start of education (below the age of six), this involves mandatory schooling in some form of ECEC. In most countries this is in pre-primary education, preschool or kindergarten, although in a few it is in a transition grade, year or class (as in Colombia for instance).

Children start primary school at the age of six in almost all countries participating in this study. In the majority of countries, children also start attending primary school at the compulsory primary school age (94.8% in 2014).

In just a few countries, including Colombia and the Czech Republic, the start of school is more commonly delayed than in other countries. The most common reasons for children to start primary education later than normal include development and health issues. Most countries indicate that children who do not start compulsory primary schooling on time are deemed not “ready” to start school yet or have severe health issues which delay their start. When parents, guardians, ECEC settings or other early childhood professionals believe the child should stay one year longer in ECEC, at home, or another setting, a professional assessment of the child’s development is done. Based on this assessment, schools, professionals and parents (and sometimes local authorities) collectively decide to delay the child’s entry to primary education.

In Japan for example, there is a mandatory check for children before they start primary school to assess their physical and mental development. Based on this, treatment, advice and additional support to the child and parents can be provided (see Chapter 5). In 15 of the 16 German Länder there are also mandatory health checks for children before they start primary school (the exception is Bayern, where it is only mandatory in special cases). A paediatrician checks the child’s physical, cognitive and socio-emotional development and looks for visual, hearing or speech disorders. If the conclusion is that the child is not yet “ready” to start school, the child can receive additional support, including physiotherapy, ergo- or speech therapy. Preschools, however, are not informed of the results of the health check – the decision about a child’s readiness for school is taken by a paediatrician, whose advice is usually binding.

Postponing the start of primary school is becoming more common in Slovenia, where 5.5% of children had their start delayed in 2010, rising to 7.5% in 2015. According to Slovenia’s response to the survey, this increase is most likely due to a rise in parents’ requests to delay their child’s start in school, triggering a rise in school readiness assessments. Most children will then start school a year later, unless they continue to have severe problems (e.g. disability) and need care in a special institution or at home.

All countries note, however, that children with special needs are encouraged to participate in regular primary education. Policies strive to include special needs children in regular schools unless the severity of the development or health issue makes it impossible. In Wales, all children are entitled to start school at the same age, irrespective of their stage of development. Local authorities are required to ensure that children who have development delays are provided with the appropriate support to allow them to fully access education. The Foundation Phase curriculum framework supports this by emphasising the importance of meeting children’s individual needs. To ensure children receive the appropriate support, children are assessed at the start of the year in which they start primary education – i.e. the school year in which they turn five. This is done through the use of the Foundation Phase Profile, which was introduced on a statutory basis in September 2015. This profile is based on a range of observations and formative assessments of each child, through which an analysis of additional needs is made.

Other frequently mentioned reasons for children not starting public primary school on time are that they are home schooled, privately-schooled or attend school abroad. In Colombia, accessibility and cultural issues can prevent children from attending primary school. Some indigenous populations, for example, choose not to send their children to school as they have different cultural beliefs, or the distance to school is too far and families do not have the means to send their children to school. In Croatia, Roma children may not start primary education from the age of six, but they can participate in a two-year specially-designed preschool programme.

In some countries, children can start primary school earlier, although this is not common practice. In Finland for example, although children start primary school at the age of seven, a child has the right to start primary education one year earlier if psychological and, if necessary, medical reviews, state that he or she has the capabilities to do so successfully. In countries where early entrance is possible, most parents take this option.

Retention in primary school is uncommon

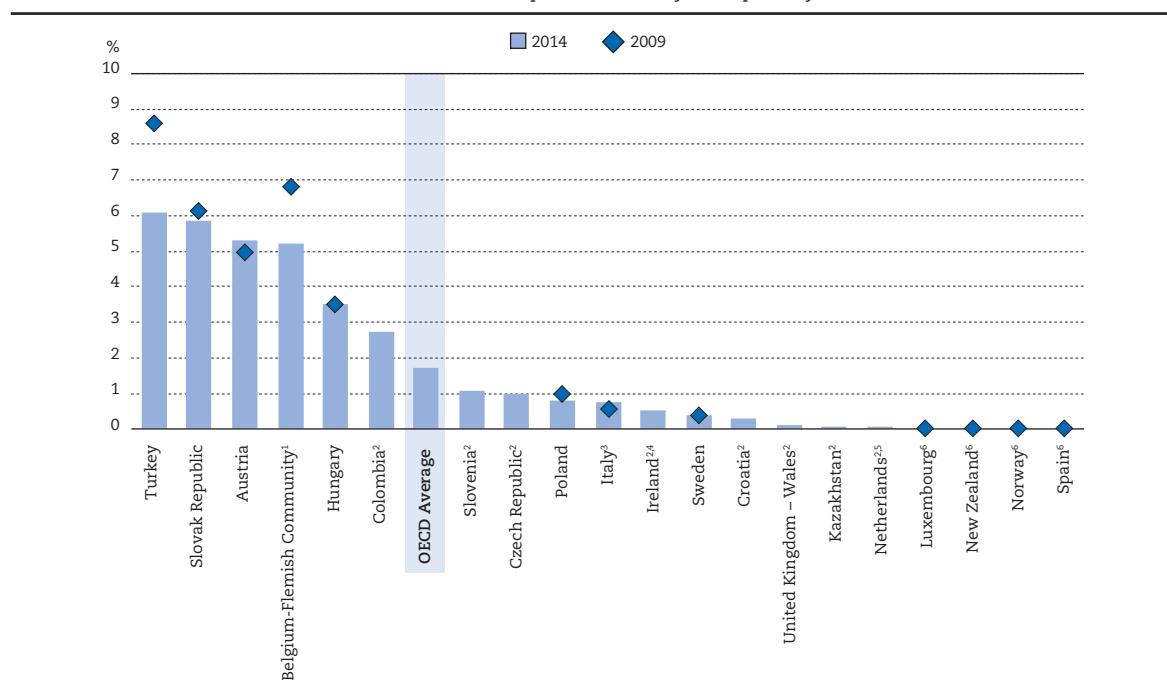
The transition from ECEC to school plays an important role in a child's educational career and affects his or her success in primary education. A strong start in primary school and a high-quality transition from ECEC to primary school can reduce drop-out rates and increase academic engagement (UNICEF, 2012). A well-prepared start and transition are also linked to reduced grade retention, higher school completion rates, successful skill development and the acquisition of academic competencies and lifelong success (Arnold, 2004; Dockett and Perry, 2007; Duncan et al., 2007; UNICEF, 2012).

Of the 20 countries with data on first grade retention rates,¹¹ 80% allow children to repeat the first year of primary school, although in practice it is rather rare (Figure 2.5). Eight countries have retention rates of 1% or less. In Kazakhstan and the Netherlands repetition is virtually non-existent, at 0.08%. Slovenia's retention rate in 2014 was just above 1%. In four countries (Colombia, Czech Republic, Hungary and Slovenia), retention rates are between 1 and 5%, while in another four jurisdictions (Austria, Flemish Community of Belgium, Slovak Republic and Turkey), retention rates were over 5%. Turkey has the highest retention rate (6.1%), followed by the Slovak Republic (5.9%). Retention rates for the first year of primary school decreased between 2009 and 2014 in most countries.

Four countries (Luxembourg, New Zealand, Norway and Spain) saw no children repeat their first year in primary school in 2014. This reflects their policy to avoid retaining children, opting instead for additional support to allow these children to continue to progress.

Figure 2.5 Retention rates in the first year of primary school are low (2014)

Share of children who repeated the first year in primary school



Notes: Information on "Retention rate in first year of primary school" is based on 20 countries.

1. For Belgium (Flemish Community), year of reference is 2011 instead of 2009.

2. For Colombia, Slovenia, Czech Republic, Ireland, Croatia, Wales, Kazakhstan, the Netherlands there is no data for 2009.

3. For Italy, year of reference is 2010 instead of 2009.

4. For Ireland, official numbers are below 0.5% but 0.5% has been indicated in this figure.

5. For the Netherlands, data refers to grade 2 repeaters (groep 2).

6. For Luxembourg, New Zealand, Norway and Spain, data for 2014 and 2009 is 0% as there are no repeaters.

Data by country can be found in Annex 2.A, Table 2.A.5.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495444>

How do countries govern transitions?

Having explored some of the current trends related to transition, this section draws on the country data to explore how transition policies and practices are governed, designed and implemented. It also looks at how they are funded and monitored. Data come from the “Survey on transitions between ECEC and primary education” (Annex A), as well as from Education at a Glance 2016 (OECD, 2016).

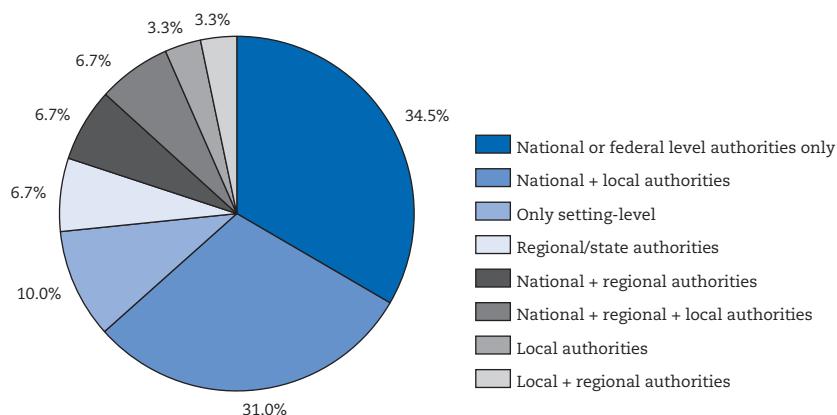
Countries vary in the administrative level at which transitions are governed

All countries mentioned that transitions are designed and implemented by the ECEC institutions and schools themselves. But national, regional and local authorities do have an influence on or say in transition policies. In over three-quarters of the countries that provided data (23 out of 29), national authorities are involved in the governance of transitions (Figure 2.6 and Table 2.4), though often in collaboration with another level of governance. In just over one-third of the countries, national authorities alone had the responsibility for designing, steering or guiding transition policies. This is the case in Chile, Colombia, Greece, Hungary, Ireland, Italy, Kazakhstan, Mexico, Portugal and Turkey.

In 31% of the cases (9 countries out of 29 with available data), national or federal governments collaborate with local authorities (primarily municipalities): the four Nordic countries (Box 2.4), the Czech Republic, Poland, the Slovak Republic, Slovenia and Wales. It is less common for national/federal authorities to co-operate with regional governments on transitions, although this is the case in Austria and Spain. National or federal authorities collaborate with both regional and local authorities in Canada and Croatia (Table 2.4). In Canada, while there is no federal department of education, there are co-ordinating bodies such as the Provincial/Territorial Directors of Early Childhood Education and Care and the Early Childhood Learning and Development Committee, created to support the co-ordination of actions and activities in ECEC, along with the Council of Ministers of Education, Canada¹² and the federal government. In countries where ECEC is mainly provided by private providers, the co-ordination with national, regional or local authorities may be even more complex.

Figure 2.6 National government is involved in guiding transitions in three-quarters of participating jurisdictions (2016)

Level of authorities involved in designing, steering or guiding transition practices



Note: The 29 countries included in the figure are: Austria, the Flemish Community of Belgium, Canada, Chile, Colombia, Croatia, Czech Republic, Denmark, Finland, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and Wales (United Kingdom). In all countries, settings decide on transition practices. The above data indicate whether authorities can be involved in designing, shaping or steering transition policies at setting level. For data by country, see Table 2.4 in Chapter 2 (below).

Source: OECD Network on ECEC, “Survey on transitions between ECEC and primary education”, June 2016.

StatLink <http://dx.doi.org/10.1787/888933495457>

In Germany, the Netherlands and New Zealand, ECEC settings and schools have full autonomy over how, if and when to plan transitions. In New Zealand, school leaders and ECEC services develop and implement transition policies that best fit the needs of individual communities, often with support from Communities of Learning. This is a new initiative that aims to connect teachers from schools and ECEC services to share teaching practices and establish coherent educational pathways for children transitioning through the education system. The collaboration that occurs through these communities can inform the development and implementation of transition policies.

Box 2.4 Case studies: Local autonomy in governing transitions in Denmark, Norway and Sweden

Denmark

In practice, ECEC settings and schools develop their own transition methods in Denmark, while local politicians set the overall political and economic framework for schools and ECEC in their municipality. Transitions are therefore not governed by national or regional authorities, but are instead steered by them through regulations or a national curriculum framework for both ECEC and primary education. The 98 municipalities are responsible for facilitating the children's transitions from ECEC to primary school and for formalising co-operation between the local ECEC settings and schools. Practices and policies thus differ across municipalities, although they all highlight the importance of mutual co-operation between ECEC settings and primary schools within municipalities.

Most municipalities in Denmark have developed transition guidelines for the settings involved. These may include the involvement of parents, communication between ECEC and school, and how to support a child with special needs.

Norway

In Norway, local authorities (municipalities) and the ECEC setting's owners (public and private) also decide on the organisation of the transition from ECEC to school. How ECEC settings and schools co-operate is not regulated at the national level. Hence there may be local differences in how transitions are arranged. This is in line with the principle of local and municipal autonomy in Norway, which allows for solutions based on local needs and in response to local challenges. The municipality is on the one hand the local authority for all ECEC settings, public and private, and on the other hand the owner of both schools and public ECEC settings. The municipality provides guidance to settings and ensures that kindergartens are operated in accordance with regulations and standards, which includes arranging a proper transition from ECEC to school. In addition, a county governor provides guidance to municipalities and setting owners on the national policies and administrative decisions. The county governor supervises the implementation of the responsibilities by the municipality. Local procedures for the transition between ECEC and school must be in accordance with the Kindergarten Act (to which ECEC settings adhere), the Education Act (for schools) and minimum regulations.

Sweden

The Swedish education system is also highly decentralised. The parliament and the government set out the goals and guidelines of education in the Education Act, various ordinances and national curricula. But the municipalities and independent education providers are responsible for organising the education within this framework. To ensure national legislation and guidelines are implemented, the National Agency for Education (NAE) and the Swedish Schools Inspectorate supervise, support, and evaluate the settings, including how they handle transitions, in order to improve quality and outcomes.

Sources: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016; Danish Ministry for Children and Social Affairs (2016), *Denmark Country Background Report on Transitions*, Ministry for Children and Social Affairs, Copenhagen, www.oecd.org/edu/school/SS5-country-background-report-denmark.pdf; Norwegian Directorate for Education and Training (2017), *Norway Country Background Report on Transitions from ECEC to Primary School*, Norwegian Directorate for Education and Training, Oslo, www.oecd.org/edu/school/SS5-country-background-report-norway.pdf; Swedish Ministry of Education and Research (2017), *Sweden Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education and Research, Stockholm, www.oecd.org/edu/school/SS5-country-background-report-sweden.pdf.

Other actors, such as inspectorates, can be involved in governing transitions

Besides governments and providers, other agencies can support the governance of transitions, including inspectorates, curriculum development agencies and early development agencies (Figure 2.7).

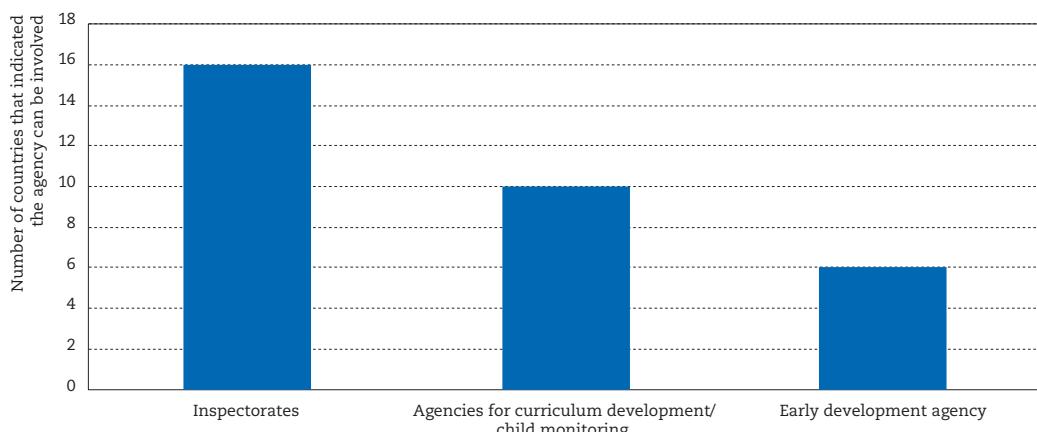
In 16 of the 18 countries that provided data, inspectorates can be involved in the governance of transitions by monitoring their overall quality, or in specific aspects such as collaboration with other education settings or parents. In Ireland for instance, the recently established Early Years Inspectorate in the Department of Education and Skills (DES) carries out early years education-focused inspections that complement the monitoring and regulatory inspection processes carried out by Tusla.¹³ These include inspecting children's educational and routine transitions, such as from home to the ECEC setting, from preschool to primary school, moving within or between rooms in the settings and between each element of the daily routine. The aim is to ensure they are sensitively managed and intentionally planned.

Curriculum development agencies can also be engaged in defining or setting the scene for transitions by addressing transitions in the curriculum framework, for example. These agencies are usually part of the ministry responsible for ECEC and/or primary education. Over half of the countries (10 out of 18) indicated that a curriculum or child monitoring agency may be engaged in transitions. For example, in the Netherlands the SLO (Stichting Leerplan Ontwikkeling; Foundation for the Development of Learning Plans¹⁴) supports organisations and schools in developing plans to ensure smooth transitions, such as continuous learning trajectories.

Early development agencies that support child development can also support the transition. This was reported to be the case in six of the countries. They may, for instance, provide help to children with special needs or conduct health checks before or just after the transit to primary education to facilitate the transition and ensure children receive appropriate support (for more, see Chapter 5). For example, Greece highlighted that school advisors are available to provide guidance to settings on transitions, among other topics.

Figure 2.7 A variety of agencies may be involved in transitions (2016)

Agencies that can be involved in designing, steering or guiding transition practices



Note: Countries indicated which agencies can be involved in transitions, and some indicated more than one agency per country.
Based on data for the following 18 countries: Austria, Croatia, Czech Republic, Denmark, Germany, Greece, Ireland, Kazakhstan, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Sweden, Switzerland and Wales (United Kingdom).

Data by country can be found in Annex 2.A, Table 2.A.6.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495469>

Average annual expenditure per child is lower for pre-primary education than primary education in two-thirds of countries

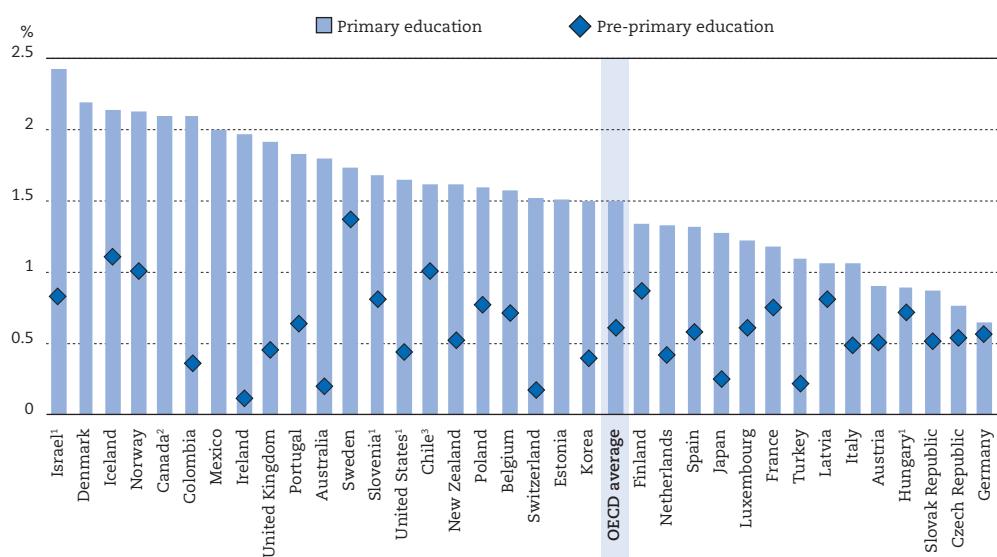
Across countries, spending levels on pre-primary education as a share of the country's gross domestic product (GDP) are much lower than spending levels on primary education. On average

across the OECD, 1.5% of a country's GDP is spent on primary education (ISCED 1), while 0.6% is spent on pre-primary education (ISCED 02), that is, less than half (Figure 2.8). However, many countries are increasing public spending to expand participation in quality ECEC. Expenditure by OECD countries on ECEC (ISCED 0) increased on average 45% between 2000 and 2013, from 0.48% of GDP to 0.69% (OECD, 2017).

There are large differences among countries in expenditure levels. Israel, Denmark, Iceland, Norway, Canada and Colombia all spend over 2% of their GDP on compulsory primary schooling, while Austria, Hungary, the Slovak Republic, the Czech Republic and Germany spend less than 1% on primary education. High levels of expenditure on primary education do not necessarily predict high spending on pre-primary education. Iceland and Norway have high spending levels on primary education and spend over 1% of their GDP on pre-primary education, which is well above the average. On the other hand, Colombia, Ireland, Korea, Switzerland, and the United States have average or above-average spending levels on primary education, but spend 0.4% or less of their GDP on pre-primary education, which is well below the average (Figure 2.8). These figures are influenced by differences in the age at which children in OECD countries transition from ECEC to primary school. In Australia, for example, children typically start primary school at five, whereas in some other countries children start primary school at six or seven. This means that some countries' expenditure on ECEC as a proportion of GDP includes the costs of educating five and even six-year-olds, whereas in other countries, such as Australia, these costs are typically captured as part of the "primary education" expenditure.

Figure 2.8 Expenditure on primary education is consistently higher than on pre-primary education (2013)

Expenditure on pre-primary and primary education institutions as a percentage of GDP
(from public and private sources of funds)



Notes:

Countries are ranked in descending order by public and private expenditure on primary education.

1. For Hungary, Israel, Slovenia and the United States, the data for pre-primary education include some expenditures on childcare as well.

2. For Canada, year of reference is 2012 instead of 2013. Data for Canada on expenditure as a percentage of GDP for primary education include lower secondary education.

3. For Chile, year of reference is 2014 instead of 2013.

Data by country can be found in Annex 2.A, Table 2.A.7.

Source: OECD (2016) Education at a Glance 2016: OECD Indicators, Tables B2.1 and C2.3, <http://dx.doi.org/10.1787/eag-2016-en>.

StatLink <http://dx.doi.org/10.1787/888933495477>

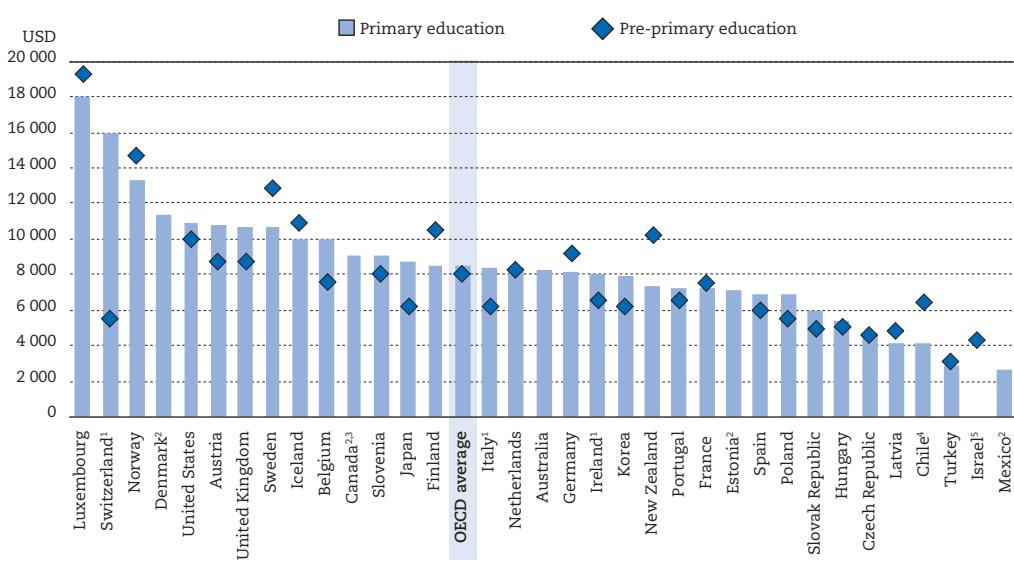
The greater share of spending on primary versus pre-primary may be partially explained by the compulsory nature of primary education, which means that participation rates are higher. Also, primary education continues for a longer period of time than ECEC, hence costs are higher. In addition, ECEC is not regarded as a policy priority in all countries.

For these reasons, the share of GDP spent on pre-primary versus primary education does not tell us what budget is allocated per child. This depends on the number of children participating in ECEC and compulsory primary school, and the total budget available for each educational level. Doing this calculation for countries with available data shows that the average annual public expenditure per child is slightly higher for children in primary education (Figure 2.9). On average in 2013, OECD countries spent USD 8 461 on every child attending primary school, compared to USD 8 070 for every child in a pre-primary setting. In two-thirds of countries (19 of the 30 countries with data available for both levels), annual expenditure per child was lower in pre-primary education than in primary education. But in one-third of countries (11 out of 30), including Australia, Luxembourg, Norway and Sweden, expenditure levels for pre-primary education were higher. Hence, in the majority of OECD countries, per-child expenditure is higher at primary level than at pre-primary level. Differences in expenditure between pre-primary and primary are due to differences in staff qualifications, statutory salaries and child-staff ratios.

Luxembourg tops all other countries for per-child expenditure in both pre-primary and primary school. Austria, Norway, Sweden, the United Kingdom and the United States also have high levels of public expenditure for both levels of education. In Switzerland, spending per child in school is far above the average, while expenditure per child in pre-primary education is far below the average.

Figure 2.9 The majority of countries spent more per child for primary education (2013)

Annual public expenditure per child in pre-primary and primary education, equivalent USD converted using purchasing power parity (PPPs) for GDP, based on full-time equivalents



Notes:

PPP: Purchasing power parity

Countries are ranked in descending order by expenditure per child in primary education.

1. For Switzerland, Ireland and Italy data concern public institutions only.

2. For Denmark, Canada, Estonia and Mexico, data is missing for annual expenditure per child in pre-primary education.

3. For Canada, year of reference is 2012 instead of 2013.

4. For Chile, year of reference is 2014 instead of 2013.

5. For Israel, data is missing for annual expenditure per child in primary education.

Data by country can be found in Annex 2.A., Table 2.A.8.

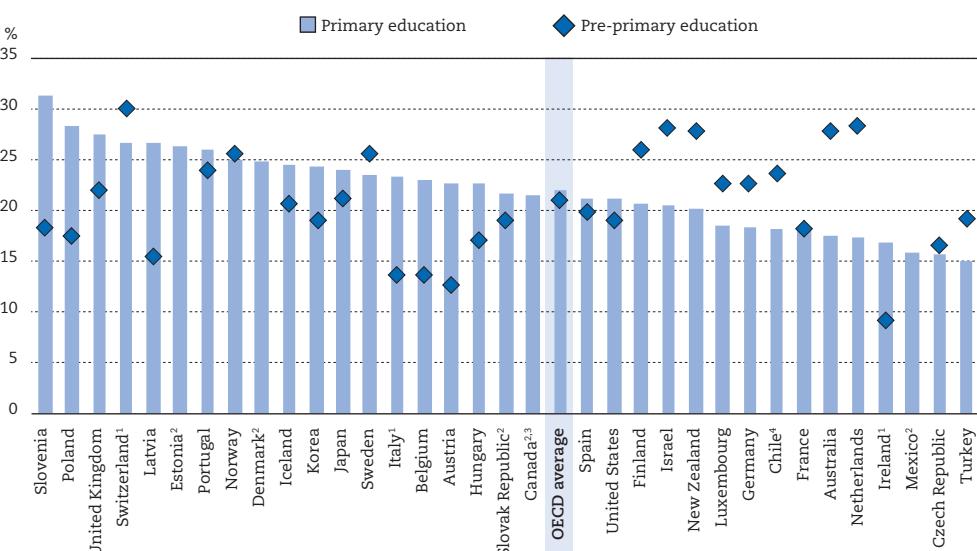
Source: Tables B1.1 and C2.3A, OECD (2016), *Education at a Glance 2016: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2016-en>.

StatLink <http://dx.doi.org/10.1787/888933495488>

The share of spending per child in GDP per capita may be a better reflection of the priority given to pre-primary and primary education (Figure 2.10). This is particularly true for primary education, which is compulsory in all countries. Expenditure per child averages 22% of GDP per capita at the primary level and 21% at the pre-primary level. Countries with low levels of expenditure per child may show distributions of investment relative to GDP per capita that are similar to countries with a high level of expenditure per child. Poland, for instance, has below average expenditures per child at both primary and pre-primary level, but spends more per child relative to GDP per capita than the average.

Figure 2.10 There are large variations in average annual expenditure per child as a share of GDP for primary education and pre-primary education (2013)

Annual expenditure per child in pre-primary and primary education for all services, relative to per capita GDP (% GDP per capita)



Notes: Data for pre-primary education based on own calculations.

1 For Switzerland, Ireland and Italy data concern public institutions only.

2 For Canada, year of reference is 2012 instead of 2013.

3 For Chile, year of reference is 2014 instead of 2013.

4 For Chile, year of reference is 2014 instead of 2013.

Data by country can be found in Annex 2.A, Table 2.A.9.

Source: OECD (2016), *Education at a Glance 2016*, OECD Indicators, Tables B1.4 and C2.3, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.

StatLink <http://dx.doi.org/10.1787/888933495495>

Monitoring transitions is not common

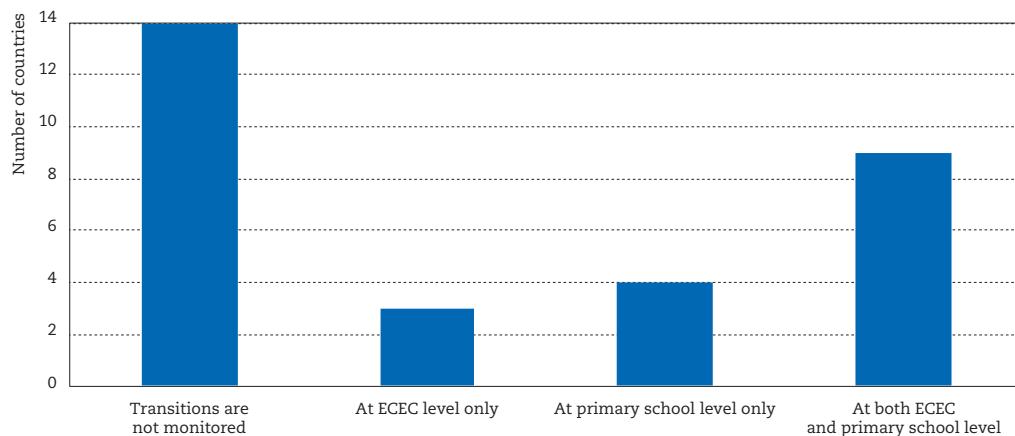
In many countries, monitoring transitions does not necessarily refer to a traditional form of inspecting or evaluating settings and their practices. It often refers to the collection of child development information at a certain point in time (before or after they start primary school); or school administration data that monitors whether children start primary school, what their background characteristics are, and whether they were in ECEC before starting school.

In 14 of the 30 countries with available data, it is not mandatory to monitor transitions (Figure 2.11), although providers can decide to monitor them themselves, as in Norway for instance. In the Netherlands, transitions are not monitored by inspectorates but can be the topic of research; researchers may monitor transition case studies, for example. Nevertheless, in the slight majority of countries (16 out of 30), transitions are monitored. In nine countries monitoring is done at both ECEC and primary school level: Canada, Czech Republic, Colombia, Hungary, Japan, Slovenia, Spain,

Sweden and Switzerland. In four countries (Denmark, Poland, Portugal and Wales) it is more common to monitor transitions at primary school level, while the remaining three countries monitor them primarily at ECEC level (Austria, Croatia and the Slovak Republic).

Figure 2.11 Countries vary in the levels at which they monitor transitions (2016)

Number of countries that indicated at what educational level transitions are commonly monitored



Note: This figure does not refer to national practices but indicates what is common in countries. In countries where transitions are not commonly monitored, local- or setting-level monitoring transition practices may occur.

Based on available data for the following 30 countries/jurisdictions: Austria, Flemish Community of Belgium, Canada, Chile, Colombia, Croatia, Czech Republic, Denmark, Finland, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey and Wales (United Kingdom).

Data by country can be found in Annex 2.A, Table 2.A10.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495509>

Transitions are monitored using several instruments

No one single method is used for monitoring transitions, and it is uncommon to monitor transition practices only or independently. Instead, transitions are part of broader monitoring of ECEC or school settings and are usually conducted at local level. This is in line with the trend described earlier, whereby transition policies and practices are commonly developed and implemented at local or institutional level. Of the 16 countries that monitor transitions, 9 indicated that transitions can be included in inspections (Figure 2.12; Austria, Croatia, Czech Republic, Japan, New Zealand, Portugal, Slovak Republic, Slovenia and Switzerland). Twelve jurisdictions and countries mentioned that parental surveys were common tools for assessing or evaluating transitions (Austria, some Canadian jurisdictions, Croatia, Finland, Germany, Hungary, Japan, New Zealand, Poland and Portugal).

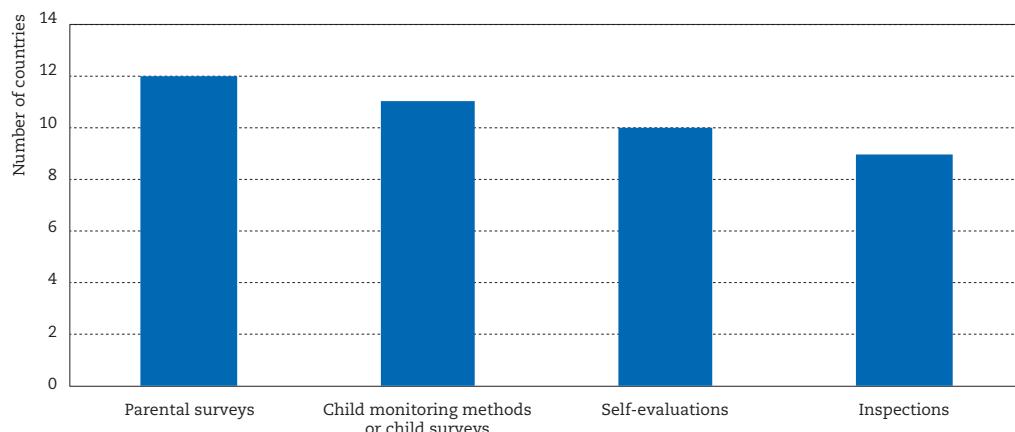
Ten countries mentioned the use of self-evaluations by settings: Croatia, Czech Republic, Hungary, Japan, New Zealand, Portugal, Slovak Republic, Slovenia, Spain and Switzerland.

Child monitoring methods, such as in the form of portfolios, child development reports or development assessments, are another common tool for monitoring transitions in 11 countries (Austria, some Canadian jurisdictions, Croatia, Denmark, Finland, Germany, Hungary, New Zealand, Poland, Portugal and Switzerland). Canada uses teacher report cards, individual educational plans or the Early Development Instrument. In Denmark, there is a mandatory language assessment in place for all children in preschool class which aims to adapt a teacher's planning and practices to the child's language skills. In Hungary, an examination of a child's maturity for school education can be conducted based on child development documentation. If additional assessment is needed, the support of specialised pedagogical services or experts (e.g. psychologists) is called for. These services

screen for any special needs of the child. In Switzerland, an assessment of a child's readiness for school is part of transition process. Further information on the use of child assessments or child development information in transitions can be found in Chapter 4.

Figure 2.12 Parent surveys are the most commonly used monitoring instruments (2016)

Number of countries mentioning common use of instrument



Note: This figure does not refer to nationally prescribed tools or instruments but indicates what tools can be commonly used in countries. Countries were able to indicate more than one instrument or tool.

Based on available data for the following 16 countries: Austria, Canada, Croatia, Czech Republic, Denmark, Finland, Germany, Hungary, Japan, New Zealand, Poland, Portugal, Slovak Republic, Slovenia, Spain, Switzerland.

Data by country can be found in Annex 2.A, Table 2.A.11.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495510>

As transitions are usually monitored at the local level, settings may conduct their own evaluations to monitor the transition to school. Eleven countries mentioned using these self-evaluations: Croatia, Czech Republic, Hungary, Japan, New Zealand, Portugal, Slovak Republic, Slovenia, Spain, Sweden and Switzerland. Box 2.5 explains how inspections and self-evaluations can contribute to monitoring transitions in Sweden. Further information on monitoring practices and policies in ECEC can be found in Starting Strong IV (OECD, 2015b).

Box 2.5 Case study: Monitoring transitions in Sweden

In Sweden, transitions can be subject to national inspections and can also included in settings' self-evaluations.

On a national level, the Swedish School Inspectorate conducts regular supervision of all municipal and independent schools, from preschool to adult education. Activities are scrutinised on a number of points, transitions included. The Education Act stipulates that every education provider within the school system should systematically and continuously plan, follow up, evaluate and develop their education through evaluations. This should be done with the participation of teachers, preschool teachers, other staff and pupils. Children in the preschool and their guardians should also participate in the evaluation and development of education.

No practices or tools are prescribed, although the National Agency for Education provides a self-evaluation form for preschool classes and schools to assess transition. The form is to be filled out by both preschools and primary schools with head teachers being responsible for pulling together the results. The form aims to analyse what has worked well and what needs to be improved, and covers topics such as co-operation with parents and guardians, collaboration with stakeholders, documentation on transition, transition dialogues, and the ability to meet the needs of the child.

Sources: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016; Swedish Ministry of Education and Research (2017), Sweden Country Background Report on Transitions from ECEC to Primary School, Ministry of Education and Research, Stockholm, www.oecd.org/edu/school/SS5-country-background-report-sweden.pdf.

What are the common organisational and governance challenges and how are they overcome?

While the topic of transitions is gaining political attention, and progress has been made, challenges remain. Learning from the experiences of countries that have tackled issues in designing and implementing transition policies can be instructive and provide inspiration to others.

This section explores some common organisational and governance challenges facing countries in their attempts to improve transitions, and outlines the strategies that various countries have used to overcome them (summarised in Table 2.5).

Table 2.5 Challenges and strategies in strengthening transitions

Challenges	Strategies
Lack of coherence across regions in transition approaches	<ul style="list-style-type: none"> • Develop a national plan or strategy to improve coherency • Develop national guides or guidelines • Develop local guides or guidelines
Difficulty in engaging all actors	<ul style="list-style-type: none"> • Monitor the state of transitions • Include transitions in laws or mandatory curriculum frameworks • Inform local governments and settings of example transition initiatives
Weak collaboration among stakeholders	<ul style="list-style-type: none"> • Review collaboration frequently • Discuss transitions with key stakeholders regularly • Provide counselling and guidance
Inequity in transitions	<ul style="list-style-type: none"> • Provide language support • Set up financial support programmes • Prioritise participation in ECEC for target groups • Provide additional financial or human resources for ECEC settings

Challenge 1: Lack of coherence across regions in transition approaches

In federal countries there can be large regional differences in curriculum content, pedagogical concepts, or minimum standards as the responsibility for regulations, design and/or content lie with individual state governments. In most other countries, responsibilities for transitions are with local authorities or the provider (see above). This may also complicate support for children transitioning from an ECEC setting to school as standards for ECEC and primary education settings may vary widely between states. When ECEC is offered mainly by private providers the co-ordination between ECEC and primary school settings or between different levels of authorities may be even more complex.

Where settings themselves have autonomy in deciding how transitions are taken care of, the result can be a wide range of practices with little alignment between them. In Austria for instance, because of the decentralised ECEC system, ECEC settings often do not co-operate with primary schools. Denmark and Norway also highlight that the decentralisation of transition responsibilities results in variations between municipalities in how transitions are handled, and thus, in varying levels of transition quality. What strategies have countries devised to improve coherence?

Strategy: Develop a national plan or strategy

Wales was experiencing challenges in implementing the Foundation Phase, the curriculum framework for three to seven-year-olds. It was found that the framework was not implemented everywhere coherently, resulting in variations in quality, in transitions and in how the framework was used. In response to this issue, a Foundation Phase Action Plan¹⁵ was developed and published in late 2016 (Welsh Government, 2016). The plan consists of a number of approaches to improve consistency across ECEC and primary schools. These include updating training of staff, improving initial teacher training, providing further parental engagement support materials, and school-to-school support.

Austria has developed a cross-national strategy to facilitate co-operation between ECEC and schools to strengthen transitions (Box 2.6). Many stakeholders were involved in the development phase of this strategy, which is expected to ensure good guidance for settings involved in transitions, and should improve the co-ordination of school entry.

Box 2.6 Case study: Developing a national transition strategy in Austria

In September 2014, the network project “ECEC – primary school” was initiated in Austria. A steering committee consisting of a wide range of stakeholders including boards of education, federal state governments, school psychologists, university colleges of teacher education, representatives from different ECEC settings and schools were actively working on a cross-regional strategy for transitions.

The aim of the project was to facilitate co-operation between teachers of kindergartens and schools, to ensure qualitative guidance, and to better co-ordinate the phase of school entry. The last year of ECEC and the first two years of primary school are regarded as the school entry phase. A total of 35 primary schools and co-operating kindergartens across the country’s nine federal states participated in the project.

The project researched the factors associated with a successful transition, and what aspects are important for staff initial and in-service education and training to ensure a strong start in school. The project has so far resulted in improved co-operation between ECEC and primary school through collaborative projects; the collection of best practice examples; the development of transition teams to support the school and the ECEC setting in the transition (see Chapter 5); and portfolios to guide transitions.

Building on the project’s output, a school entry and primary school legislative package was passed in July 2016. Guidelines on transition from ECEC to primary schooling were published by the Charlotte Bühler Institute. Implementation began at the start of the school year 2016/17.

Sources: OECD Network on ECEC, “Survey on transitions between ECEC and primary education”, June 2016; Charlotte Bühler Institut (2016), Austria Country Background Report on Transitions from ECEC to Primary School, Charlotte Bühler Institut, Vienna, www.oecd.org/edu/school/SSS-country-background-report-austria.pdf.

Strategy: Develop national guides or guidelines

The Ministry of Education and Research in Norway published the national guide, From the Eldest to the Youngest, in 2008 (Kunnskapsdepartementet, 2008). The guide was developed for municipalities, ECEC settings and schools and aims to strengthen the coherence between ECEC and school, and create a smooth transition for children starting school. It is based on research findings and experiences from local transition projects. It also refers to Starting Strong II (OECD, 2006) and relevant Norwegian White Papers from 2008 and earlier. It is not mandatory to use the guide, though a survey in 2010 showed that about one-third of kindergartens do use it as a basis for their work in preparing children for school (Kunnskapsdepartementet, 2015). The Norwegian Directorate for Education and Training published a guide in 2014 on transitions for children with special needs in particular. Another interesting initiative is the development of a checklist and guidelines for good transitions between ECEC and school by the National Parents’ Committee for Kindergarten in co-operation with the National Parents’ Committee for Primary and Secondary Education and the Union of Education Norway. These are available online.¹⁶

Strategy: Develop local guides or guidelines

Locally developed resources and advice on transitions are also available in Norway. The municipality of Oslo has developed a guide with practical examples of how kindergartens and schools should co-operate on transition. The municipality of Bergen has a co-operation plan for ECEC and school. This plan includes a description of the foundation for co-operation and coherence, including relevant regulations and steering documents, research and knowledge about learning, relevant learning content and the learning culture in both ECEC and school. It also includes information about how co-operation can and should happen in Bergen municipality.

In Denmark, although responsibility for transitions lies with the municipalities, schools and ECEC settings can decide what practices they use. Most municipalities have developed local transition guidelines for settings, including information on involving parents, communication between ECEC and school settings, and how to support a child with special needs. These guidelines help settings strengthen transitions as they provide some support and guidance. A national network (named BKF) including municipal representatives of ECEC, school, and social affairs allows best practices to be shared on the use of the guidelines and municipalities to learn from each other in order to better align transitions.

Challenge 2: Difficulty in engaging all actors

While national or federal authorities, and research findings, may emphasise the importance of continuous learning experiences and good transitions from ECEC to primary school, it is important that this enthusiasm is shared by local authorities and all the settings involved in implementing them. A challenge arises, though, when certain actors are not actively involved in drafting or implementing transition approaches or when actors are not very keen on or proactive about collaborating.

Strategy: Include transitions in laws or mandatory curriculum frameworks

Several countries include the topic of transitions in their (mandatory) curriculum frameworks or in laws. This obliges local authorities, ECEC settings and schools to implement them. Denmark's Act on Day Care of 2007 emphasises that one of the purposes of ECEC is to create better coherence between different levels of education, and hence municipalities and settings are mandated to ensure this coherence.

Norway's Education Act and the Quality Framework for schools state that good and systematic co-operation between different education providers eases the transition from one education stage to the next in the course of one's education. These documents express the expectation that there should be good connections between ECEC and school.

In both its curriculum for pre-primary education and curriculum for primary education, Finland emphasises that the different settings, as well as other stakeholders involved in transitions, should collaborate and ensure a smooth transition. They mention that the different actors and levels of education should form an "entity" and they should be well aligned with one another.

Strategy: Share example transition initiatives with local governments and settings

In Japan, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) organises meetings for boards of education and the supervisors of schools and ECEC settings to encourage them to strengthen transitions, amongst other areas. These meetings, held in each prefecture, consist of presentations by local governments on their innovative policy initiatives for transitions. In addition, in 2009, the national government prepared a collection of case examples on transitions. These examples were published and distributed to prefectoral and municipal governments. In 2016, the national government plans to implement a programme which deploys early childhood education advisors to settings to provide guidance and advice on improving quality of care and education, including transitions where needed.

Strategy: Monitor the state of transitions

One strategy for keeping track of whether municipalities and settings are developing and implementing practices and approaches to improve transitions can be to monitor them. Japan does thus under its nationally published Report on the Seamless Connection between Early Childhood Education and Primary Education (2010) as a measure for promoting transition-related initiatives. The report provides guidance on how municipalities can evolve from co-operation to connection in transitions. This is indicated in the form of steps. Step 0 means that there are no plans for co-operation in

place; Step 1 indicates that the municipality is at a stage where it wishes to start co-operation on transitions; Step 2 means that several classes, meetings and other events are organised but no curricula regarding transitions have been implemented yet; Step 3 is similar to Step 2, but the municipality has developed and implemented transition curricula; and Step 4 indicates that reviews are being conducted on how to further improve transitions and the accompanying curricula. Japan conducts annual surveys of the actions municipalities have taken to strengthen transitions and to record the step they have reached. The 2014 survey results revealed that 59.6% of the municipalities were at Step 2, 17% at Step 3, and 9.6% were at Step 0. Compared to the previous surveys, the number of municipalities at Step 3 had increased and the number of municipalities at Step 0 had decreased. These results suggest that the implementation of transition practices is growing across the country, though further efforts are needed to extend them.

Challenge 3: Weak collaboration among stakeholders

Collaboration between ECEC settings and primary schools, and with parents and other relevant stakeholders, play an important role in ensuring transitions are successful. Yet countries indicate that arranging collaboration among the different stakeholders involved in transitions can be difficult. For example, stakeholders do not co-operate with one another at all, or if they do, collaboration can be weak. To support or strengthen stakeholder collaboration, some countries review collaboration, while others discuss the topic of transitions with different stakeholders regularly, or provide guidance to stakeholders.

In addition, training in transitions for ECEC and school staff can support collaboration and improve transitions for children. Chapter 3 on professional continuity addresses the topic of training, among others, while Chapter 5 addresses the importance of collaboration with stakeholders and country strategies to ensure collaboration in more depth.

Strategy: Review collaboration frequently

In **Sweden**, the National Agency for Education (NAE) has developed a self-evaluation form on transition for preschool classes and schools. This form aims to analyse what has worked well and what needs to be improved during transition phases. Through the use of this form, settings can evaluate co-operation with parents and guardians, and with stakeholders, documentation on transition, transition dialogues, and the ability to meet the needs of the child. It provides useful insights into what needs to be improved.

In **Japan**, each ECEC setting and school monitors their own performance and practice through self-evaluations, as well as through stakeholder reviews. Settings and schools draw up a plan for collaboration and exchange at the beginning of each school year. This plan sets out their goals and initiatives for the coming year. At the end of a school year, a review meeting is held to assess and review the content of the plan and its goals. The issues that arise at this review meeting are taken into account when setting up the following year's plan. This contributes to self-awareness within settings of their co-operation, while providing the opportunity to improve their collaboration and strengthen transition for children.

Strategy: Discuss transitions with key stakeholders regularly

The Ministry of Education and Research and the Directorate for Education and Training in **Norway** consult regularly with key actors on current issues, including transition from kindergarten to school as necessary. Among the key actors are the National Parent's Committee for Kindergarten, labour unions, the Norwegian Association of Local and Regional Authorities and the National Association of Private Kindergartens. This creates greater support from the field for transition practices and policies, including ECEC settings and schools, as well as families.

When it comes to larger changes and reforms, the **Swedish** Government uses major consultations with the key stakeholders involved in setting school policy. A common practice is to refer proposals to the stakeholders for consideration. This practice has been a part of the Swedish policy-making process for a long time with the main purpose being to inform the government of the various possible consequences of a proposal. The public and other stakeholders can provide statements and opinions, or suggestions. All opinions are combined and taken into consideration by the government, but are not decisive to the outcome of the policy-making process. This can be seen as an opportunity to foster political participation and strengthen democracy.

In **Slovenia** too, there are consultation procedures among the stakeholders in designing education policy, including transitions. The Ministry of Education proposes new or changes to laws and legislation in co-operation with representative associations of municipalities. Though it is not obligatory, the ministry usually also seeks the opinions of other relevant associations, including the associations of kindergartens, ECEC heads, and parents. When changes affect the minimum quality standards, the Minister of Education also seeks the opinion of the Expert Council for General Education and the teachers' union as well as the Education, Science and Culture Trade Union of Slovenia.

Strategy: Provide counselling and guidance

In **Slovenia**, counselling services are available in ECEC settings and schools. These services help settings in organising their education, and when needed, transitions between the two settings. The counselling service participates in the planning, establishment, and maintenance of appropriate conditions for a safe and supportive educational environment that allows for optimal development – thus also during transition periods. The counselling service can also support ECEC and primary school teachers and parents.

In the **Netherlands**, the SLO (Stichting Leerplan Ontwikkeling, or the Foundation for the Development of Learning Plans) designs or helps design continuous learning trajectories for ECEC organisations and schools to ensure better and smoother transitions. SLO serves as the national institute for curriculum development in the Netherlands. It is an independent, non-profit organisation, bridging the contexts of policy, research and practice.

Challenge 4: Inequity in transitions

Children from disadvantaged backgrounds often perform less well in education compared to their more advantaged peers (see Chapters 1 and 6). Therefore, countries implement a wide range of policies and programmes to improve equity in the early years and support disadvantaged groups of children, such as children with learning difficulties. Most of these equity programmes are usually not focused on the transition phase per se, but aim at helping children with specific needs throughout their early years, including the period when children transit to primary school. Disadvantaged children can benefit from additional support during the early years and start of primary school, and from high-quality transitions between ECEC and primary school (see Chapter 1).

Some countries, such as Wales, are taking regulatory measures to ensure equity across ECEC and schools. The introduction of a new Additional Learning Needs Act in the next few years will strengthen the role of local authority nurseries and settings in supporting children with additional learning needs. The new code accompanying the act will contain guidance on transitions for those with additional learning needs. Other opportunities for tackling inequity include setting up financial support programmes, prioritising participation in ECEC for certain target groups and providing additional financial or human resources for ECEC settings. Initiatives aimed at collaborative partnerships with parents and other stakeholders include the development of family support initiatives such as the HIPPY (Home Instruction for Parents of Preschool Youngsters) programme and the Flying Start Initiative, and providing language support, are further explained in Chapter 5.

Strategy: Provide language support

Local authorities in **Denmark** are responsible for performing a language assessment for children aged three if any linguistic, behavioural or other issues indicate that the child may need additional language stimulation. The municipality is also obliged to conduct a language assessment of all children aged three who are not enrolled in ECEC. If the assessment indicates any development delays the municipality will provide 15 or 30 hours of language development support per month in an ECEC setting. The purpose of this programme is to ensure that all children have an equal level of language and literacy skills when starting school. Some municipalities do another language assessment when the child is five or six, but this is not a formal requirement.

Strategy: Set up financial support programmes

In **Wales**, the Rewriting the Future strategy document sets out a range of actions to be delivered nationally and locally to reduce the gap in attainment between the children from the most deprived background (as measured by entitlement to free school meals) and their peers. The strategy promotes the use of approaches known to have a disproportionate effect on children from disadvantaged backgrounds and is supported by a Pupil Deprivation Grant provided to ECEC settings, which included an element for three to four-year-olds for the first time in school year 2014-15. It includes GBP 300 (or around USD 373) for each child likely to be entitled to free school meals when they begin school. This should support children and their parents at the start of school. There is also a target to reduce the gap in attainment at the end of the Foundation Phase (seven-year-olds) by 12% compared with the 2012 level.

Japan also makes use of financial aid to support families in need. The costs of school supplies, transport, and lunches, among others, can be covered by the government for families who have difficulties in covering these costs. Additionally, to ensure that more children can benefit from formal early learning experiences, municipalities may cover the parental fees for ECEC. To lower the financial burden of ECEC on low-income households, fees are set according to the income of parents, fees for the second child have been halved, and ECEC has been made free for every third or further child.

To ensure all children can have access to ECEC, parents in **Denmark** and **Norway** with an income below a certain threshold receive an “aided place subsidy” from the local authority in addition to the general subsidy for a place in ECEC. This will lower the costs parents pay for ECEC. For parents with very low incomes, the “aided place subsidy” covers all parental costs.

In **Slovenia**, preschool programmes in kindergartens (integrated ECEC settings for children from one to six years old) require parental contributions. The fees are determined based on parental income and families’ wealth. If more than one child from a family attends kindergarten, the fees are reduced for the second child and waived for subsequent children.

Strategy: Prioritise participation in ECEC for target groups

In **Slovenia**, children with special education needs and from disadvantaged families¹⁷ have priority when allocating kindergarten places. Given the importance of high-quality ECEC for these groups in particular, the priority allocation can be viewed as supporting transition to school.

Strategy: Provide additional financial or human resources for ECEC settings and schools

When ECEC settings in **Slovenia** have a large number of Roma children, or when a group has a minimum number of Roma children, additional support is provided to ensure that all children benefit from ECEC and can transit well to primary education. This might include additional staff for groups, hiring Roma assistants to help educate Roma children, and additional public funding for materials, staff, decreasing group sizes and smaller group teaching.

In **Sweden**, schools can receive additional funding based on their needs. Many of the state grants or subsidies for various measures for which the education providers can apply are weighted, with a certain amount of money being earmarked for schools that are facing difficulties. Achieving an equitable education and providing the possibilities for this is a priority to the government. For example, the National Agency for Education identifies, sets up contracts with, and actively supports schools with development measures in order to improve the results and outcomes. The measure does not, however, cover preschools or preschool classes.

To improve educational equity and quality, schools in **Finland** can also benefit from additional funding – for example in areas where there are a large number of families from poor socio-economic backgrounds. This additional funding can be used, for instance, to lower group sizes so that children receive extra attention.

Policy development pointers

This final section draws out some policy themes emerging from countries' experiences and struggles in improving the organisation and governance of transitions. These are exploratory and seek to provide a source of inspiration when designing and revising policies and practices.

View transitions through the lens of holistic early development approaches

As Finland mentioned, it is important not to view a transition as an individual part of system, but as a holistic practice (Chapter 6). It is also essential to understand that there is not just one transition in place, but that there are many horizontal and vertical transitions involved – such as the transition between ECEC and primary school, as well as the transition between home and school, or between school and an after-school setting. When viewed as a holistic concept, it becomes clearer that transitions are multi-faceted and should not merely involve the settings the child moves away from and transits to. Rather, transitions should address pedagogical, developmental, and professional aspects involving staff, teachers, managers, other authorities and other relevant stakeholders.

Address equity at all levels of education, not only transitions from early childhood education and care to school

As noted by the Nordic countries and Slovenia, equity is an important topic throughout education and not only in ECEC. This reflects a continuous need to address equity in all levels of education, including during the transitions from ECEC to school. Children should continuously receive the support they need to succeed in education and develop, not only at specific ages or stages (e.g. transitions).

Use evidence-based policy

Evidence-based policy and practice are an important approach in the field of education, including transitions. As Austria notes, putting the best available evidence from research at the heart of policy development and implementation helps people make well-informed decisions about policies, programmes, and projects. They point out that to ensure evidence-based policy making is successful, the development, implementation, and dissemination of sustainable strategies require intensive co-operation between researchers, politicians and administrators. In addition, co-operation with the media is important as they exert considerable influence on political decisions.

To date, there is not much research on the topic of transitions and what elements of transitions are linked to improved child development. Chapter 6 outlines some of the specific areas where greater research is needed. Countries can also collect evidence on transitions themselves, and feed it into policy design (see the example of Japan in Challenge 2 above).

Promote strong leadership by municipalities

When there is little leadership or focus by national or local authorities in transitions, successful transitions are harder to achieve. Local leadership can decrease the tensions in establishing transitions. Japan highlighted that it is important that prefectures and municipalities demonstrate leadership, given that transitions are mostly arranged at the local or setting level. This can set an example to ECEC and school settings and can encourage them to collaborate. In Japan, a prefectoral or municipal board of education usually formulates basic policies on transitions. The board of education of a municipality or prefecture can then provide support to settings to implement these through joint training workshops for teaching staff at kindergartens, nursery centres and primary schools. They can also establish a transitions liaison council consisting of different schools and settings to encourage collaboration.

While local leadership is key in Denmark, the local responsibility for ECEC and transitions to school results in variations in how the municipalities handle children's transition from ECEC to school. Denmark noted that national requirements for ECEC and primary education on goals and content of (successful) transitions can help reduce the large variance in policies and practices among municipalities and ensure a minimum level of consistency.

Lastly, as noted by Finland and Denmark, when the responsibility for ECEC and (primary) education lies with the same (local) department, this facilitates the development of transition practices. As with national ECEC policies, the integration of ECEC and primary education can make it easier to align transition practices.

Establish collaboration and mutual understanding as the first step in creating continuity

Transition-related initiatives should start with collaboration, such as exchanges between ECEC and primary school staff, to allow both parties to share the issues they face. These can be the first steps towards continuity and coherence, from where further steps to smooth transitions can be taken – such as the development of a transition curriculum. This is confirmed by a report on transitions by Japan's consultative council for research and study of the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

As Denmark indicated, the lack of shared knowledge about the ideas, values and methods in schools versus ECEC, such as differences in pedagogy, philosophy and practices, can make collaboration difficult. Hence, it is very important to have a mutual understanding of each other's work and expectations of one another. This will benefit communication and can bring collaboration to the next level. Austria highlighted the importance of this in its very decentralised ECEC system where there are different pedagogical concepts in place. This complicates support to children transitioning from an ECEC setting to school. Slovenia also highlights how differing perspectives on methods, pedagogy and philosophy in kindergarten and primary schools cause tensions and can harm transitions. Addressing these challenges are the subjects of Chapters 3, 4 and 5.

Align objectives of ECEC and schools

To increase mutual understanding, Denmark proposes that broad objectives for ECEC should be brought into line with the targets and goals for primary schools, or vice versa. Discussions around this process, and the final outcome, will create more common ground, and can improve mutual understanding of each other's methodologies and aims. The ultimate outcome would be greater coherence between ECEC and school. Slovenia and Norway also believe that when the objectives of early education and primary school are better aligned and more clearly communicated, this can benefit collaboration between the two settings and can support the implementation of transition practices. In Slovenia for instance, differences in perspectives on the objectives of ECEC and primary schools makes communication and co-operation between the different settings harder. Training in each other's objectives, for both ECEC and school staff, can align objectives better and improve transitions.

Annex 2.A. Detailed country-by-country responses

For **WEB** tables, see: <http://dx.doi.org/10.1787/9789264276253-en>

Table 2.1	Common organisation of regular ECEC and primary education, by jurisdiction (2016)
Table 2.2	In most participating jurisdictions, ECEC and schools are physically integrated (2016)
Table 2.3	Most, but not all, children start both compulsory and primary education at the age of six (2016)
Table 2.4	Level of authority involved in transition policies, by country (2016)
WEB	Tables 2.A.1 Organisation of transitions between ECEC and primary school, by country (2016)
WEB	Tables 2.A.2 Separate year or class/group in place for children the year before compulsory primary school (2016)
WEB	Tables 2.A.3 Enrolment rates at age 3, age 5 (or year before primary school starts) and in primary education (2014)
WEB	Tables 2.A.4 Share of children (in %) in first year of primary school who participated in ECEC the year before (2014 and 2009)
WEB	Tables 2.A.5 Retention rate (%) in first year of primary school (2014 and 2009)
WEB	Tables 2.A.6 Agencies that can be involved in transition policies (2016)
WEB	Tables 2.A.7 Expenditure on pre-primary and primary education institutions as a percentage of GDP (2013)
WEB	Tables 2.A.8 Annual expenditure per child in pre-primary and primary education (2013)
WEB	Tables 2.A.9 Annual expenditure per child in pre-primary and primary education for all services, relative to per capita GDP (2013)
WEB	Tables 2.A.10 Monitoring transitions (2016)
WEB	Tables 2.A.11 Common tools/instruments used to monitor transitions (2016)

Table 2.1. Common organisation of regular ECEC and primary education, by jurisdiction

Jurisdiction	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds			
	Mainly child care provision													
	Pre-primary education provision or integrated early childhood education and care (ECEC)													
	Compulsory ECEC/ pre-primary education													
Compulsory primary schooling (ISCED 1)														
Austria	Crèche (in parts of Austria this is integrate in Kindergarten)			Kindergarten	Mandatory last year of Kindergarten	Vorschulstufe (Pre-primary school for children aged 6 who are not mature enough to start primary school)	Volksschule (starts at 6 years if children are mature enough)							
	Day care parents/mothers													
Belgium – Flemish Community	1,00	1,00	Kleuterschool (nursery education)			Lagere school			Up to 12					
Canada*	See notes by Canadian jurisdictions below													
Canada - Alberta	Various licensed/regulated early childhood education and care programmes				Kindergarten	Primary/elementary school			Up to 12					
Canada - British Columbia	Various licensed/regulated early childhood education and care programmes				Kindergarten	Primary/elementary school			Up to 12					
Canada - Manitoba	Strong Start Program*				Junior kindergarten (in some schools)	Kindergarten	Primary/elementary school (compulsory from age 7)			Up to 12				
Canada - New Brunswick	Various licensed/regulated early childhood education and care programmes*				Kindergarten	Primary/elementary school			Up to 12					
Canada - Newfoundland and Labrador	Various licensed/regulated early childhood education and care programmes				Kinderstart Program*	Kindergarten								
Canada - Northwest Territories	Various licensed/regulated early childhood education and care programmes				Junior kindergarten (in some schools)	Kindergarten	Primary/elementary school			Up to 12				
Canada - Nova Scotia	Various licensed/regulated early childhood education and care programmes				Grade Primary	Primary/elementary school			Up to 12					
Canada - Nunavut	Various licensed/regulated early childhood education and care programmes				Kindergarten	Primary/elementary school			Up to 12					
Canada - Ontario	Various licensed/regulated early childhood education and care programmes				Junior kindergarten	Kindergarten	Primary/elementary school			Up to 12				
Canada - Prince Edward Island	Various licensed/regulated early childhood education and care programmes				Kindergarten	Primary/elementary school			Up to 12					
Canada - Québec	Various licensed/regulated early childhood education and care programmes				Full-time école maternelle for children with disadvantaged backgrounds, and part-time for children with special needs and low SES	L'éducation préscolaire (kindergarten)	Primary/elementary school			Up to 12				
Canada - Saskatchewan	Various licensed/regulated early childhood education and care programmes			Pre-K (in some communities)	Kindergarten	Primary/elementary school (compulsory from age 7)			Up to 12					
Canada - Yukon	Various licensed/regulated early childhood education and care programmes				Pre-K (in the majority of communities)	Kindergarten	Primary/elementary school			Up to 12				
	Learning Together Program													
Chile**	Educacion Parvularia (Sala Cuna y Nivel Medio Menor)/ Pre-primary education (day care and lower middle level)	Jardines Infantiles (Childcare Centres)		Nivel de Transición 1 (1 st transition level in pre-primary education)	Nivel de Transición 2 (2 nd transition level in pre-primary education)	First cycle of primary school								

Table 2.1. Common organisation of regular ECEC and primary education, by jurisdiction (continued)

Jurisdiction	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year olds			
	Mainly child care provision													
	Pre-primary education provision or integrated early childhood education and care (ECEC)													
	Compulsory ECEC/ pre-primary education													
	Compulsory primary schooling (ISCED 1)													
Colombia***	Centre-based, community-based or family-based care (can extend to 3 and 4-year olds)	Pre-Kindergarten	Kindergarten	Transition Grade				Educación básica primaria (primary education)			Up to 12			
Croatia	Kindergarten				Preschool programme			Primary/elementary school			Up to 15			
Czech Republic	Child care		Mateřská škola (kindergarten)					Základní škola (1 st stage of primary school)			Up to 11			
Denmark	Dagtibud (integrated ECEC settings)					Obligatorisk børnehaveklasse (obligatory kindergarten class)		Folkeskole (public school)			Up to 16			
Sweden	Förskola (preschool)					Förskoleklass (preschool class)		Grundskola (primary school)			Up to 16			
Finland	Päiväkoti (integrated ECEC settings)					Esiopetus (pre-primary education)		Comprehensive school/basic education			Up to 16			
Germany (can differ between Lander)****	Krippen (crèche, day nursery)	Kindergarten (kindergarten)			Vorklassen (preschool class)			Grundschule						
						Schulkindergarten (school kindergarten)								
Greece	Βρεφικός και Παιδικός Σταθμός / Vrefikos & Pedikos Stathmos (kindergarten and early childhood)	Nηπιαγωγείο / Nipiagogio	(Pre-primary education)				Dimotiko Scholio (primary education)				Up to 12			
Hungary	Korai gondozási és nevelési programok (early care and education programmes)	Óvoda (Kindergarten)					Általános iskola (general school)				Up to 15			
Ireland	Preschool ECCE Scheme			Preschool ECCE Scheme or Junior infants (part of primary school)	Senior infants (part of primary school)		Primary school				Up to 12			
Italy	Nido (Nursery/child care)	Scuola dell'infanzia (pre-primary school)					Scuola primaria (primary school)				Up to 11			
Japan	認定こども園 Nintei Kodomoen (Centre for Early Childhood Education and Care)						小学校 shōgakkō (Elementary school)							
	保育所 Hoikusyo (day nursery)				幼稚園 Youchien (Kindergarten)						Up to 12			
Kazakhstan	Mini-centres or kindergartens					Pre-primary class (generally for 6-year olds but can also be used by 5-year olds or 7-year olds)	Primary school (generally started at age 7, but can also be started at age 6 or 8)				Up to 11			
Luxembourg	Child care (crèches)		Enseignement fondamentale cycle 1 (1 st cycle of pre-primary education)	fondamentale cycle 1 (1 st cycle of pre-primary education)		Primary school (second cycle of enseignement fondamentale)	Primary school (third cycle of enseignement fondamentale)	Primary school (fourth cycle of enseignement fondamentale)			Up to 11			
Mexico	Educacion Inicial (early childhood education)		Educacion Preescolar (pre-primary education)				Primary education				Up to 12			
Netherlands	Kinderopvang en peuterspeelzaal (child care and playgroups)			Groep 1 (group 1 of pre-primary education - part of primary school)	Groep 2 (group 2 of pre-primary education - part of primary school)		Basisschool (primary school)				Up to 12			

Table 2.1. Common organisation of regular ECEC and primary education, by jurisdiction (continued)

Jurisdiction	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds				
Mainly child care provision															
Pre-primary education provision or integrated early childhood education and care (ECEC)															
Compulsory ECEC/ pre-primary education															
Compulsory primary schooling (ISCED 1)															
New Zealand	Integrated centre- or home-based ECEC; playcentres						Primary school (most children start primary school at age 5 instead of compulsory school age 6)								
Norway	Barnehage (kindergarten)						Barneskole (primary school)								
Poland	Złobek (child care)			Edukacja przedszkolna (preschool education)			Mandatory preschool education	Edukacja w szkole podstawowej (primary education)							
Portugal	Crèche (child care)			Educação Pré-escolar (pre-primary education)			First cycle of Ensino Básico								
Slovak Republic	Nursery school			Materska Skola (kindergarten)			Primary school								
Slovenia****	Vrtec (kindergarten)			Osnovna šola (basic school; integrated primary and low-secondary level of education)			Up to 15								
Spain	Primer ciclo de educación infantil (early childhood education)			Segundo ciclo de educación infantil (pre-primary education)			Educación Primaria (primary education)								
Sweden	Förskola (preschool)						Förskoleklass (preschool class)	Grundskola (primary school)							
Switzerland	Kindertagesstätten / crèches / nidi d'infanzia (crèches)				Kindergarten / école enfantine / scuola dell'infanzia (kindergarten)		Primarschule / école primaire / scuola elementare (primary school)								
Turkey	Erken cocukluk donemi (child care)			Okul oncesi egitim (pre-primary education)			İlköğretim Okulu (primary school, usually starts at 5.5 years)								
United Kingdom – Wales	Most commonly a non-maintained setting e.g. childminder				Most commonly a maintained setting e.g. school-based nursery	Foundation Phase - the first phase of compulsory primary education		Key Stage 2 – the second phase of compulsory primary education							

* In Canada – New Brunswick, the mandated curriculum and staff requirements will increase with the 2016–2017 legislation for licensed/regulated ECEC programmes.

** In Chile, there is one curriculum framework, but children are grouped by age. The national curriculum for ECE has a comprehensive approach to education, establishing terminal objectives for the entire ECEC level (0–6). Nonetheless, in terms of structure, the system is organized in six educational levels located in separated settings.

A- Integrated ECEC settings. These settings receive children from birth and offer educational services integrated with care provision.

0 – 11 months: Sala Cuna Menor (Lower Nursery)

1 – 1 year and 11 months: Sala Cuna Mayor (Upper Nursery)

2 – 2 years and 11 months: Nivel Medio Menor (Lower Middle Level)

3 – 3 years and 11 months: Nivel Medio Mayor (Upper Middle Level)

B- The last two years of ECE are commonly located in the same grounds as primary schools and serve as transition years before primary school.

4 – 4 years and 11 months: Primer Nivel de Transición (1st Transition Level or Pre-kindergarten)

5 – 5 years and 11 months: Segundo Nivel de Transición (2nd Transition Level or Kindergarten)

** In Colombia, the following settings exist:

Institutional Settings

1. Centers for Child Development (CDI) – this is the official institutional modality for children 0-5 that provides education and care, including education, nutrition, psychological ad socio-emotional support.
2. Community gardens (*jardines comunitarios*) – children between 2 and 4 years and 11 months old. Children receive education and care, including education, nutrition, psychological ad socio-emotional support.
3. Child care homes (*hogares infantiles*) – children 6 months to 5 years old for low-income or displaced families. Specialized in providing early childhood education and care for children of parents with work commitments.

Community Settings

4. Community homes for family wellbeing (HCBF) – principally for children between 2 and 5 years old, this setting is in community centers or homes and run by “community mothers” who are in charge of providing care . Groups of Community Homes share an interdisciplinary team that includes coordinators, administrators, psychologists, health and nutrition professional, auxilary, and pedagogical specialist.
5. Community homes FAMI (HCB-FAMI) – the community homes focus on vulnerable or displaced families, mainly in rural areas. This setting serves both pregnant and breastfeeding women as well as children younger than 2 years old.

Family settings

6. Family care setting – in very low income areas, this setting focuses on children age 0 to 2, but also provides care for children up to 6 years old. Children receive care in a group setting once a week and receive monthly home visits by educational agents that also serve to train families in child care.

Pre-jardin and jardin (pre-kindergarten and kindergarten)

7. Pre-kindergarten and kindergarten – for children ages 3 and 4 within public schools. Provide integral care, including education.

The transition grade

8. Transition grade – the pre-primary transition grade is mandatory for children age 5 and provides integral care and education in preparing children ahead of the beginning of primary education.

*** In Germany, there is currently a trial of a “Schuleingangsphase” in the Länder except Saarland. This is a special form of school entry. Grades 1 and 2 are combined and the children learn in mixed-age groups, according to their abilities. Furthermore, all children in compulsory primary school age start school when they are 6 years old. Possible missing competencies are compensated with individual support.

**** In Slovenia, preschool education is mostly organised in kindergartens (integrated ECEC settings for children from 11 months to 6 years old).

Table 2.2 In most participating jurisdictions, ECEC and schools are physically integrated¹ (2016)

	Professional continuity	
	ECEC and primary education are usually not integrated	Pre-primary education (preschool, nursery education, kindergarten) is commonly integrated with schools
Austria ²	✓	
Belgium – Flemish Community		✓
Canada		✓
Chile		✓ (nivel de transición 1 y 2)
Colombia		✓ (transition grade)
Croatia ³	✓	
Czech Republic	✓	
Denmark		✓ (kindergarten class)
Finland	✓ (for pre-primary education in 80% of cases)	
Germany	✓	
Greece		✓
Hungary	✓	
Ireland ⁴		✓ (junior and senior infants)
Italy		✓
Japan	✓	
Kazakhstan		✓ (pre-primary classes)
Luxembourg	✓	
Mexico	✓	
Netherlands		○ (groep 1 and 2)
New Zealand	✓	
Norway	✓	
Poland	✓	
Portugal ⁵		✓
Slovak Republic	✓	
Slovenia	✓ (in around 48% of cases)	✓ (preschool education part of primary education in around 52% of cases)
Spain		✓
Sweden		✓ (preschool class)
Switzerland ⁶		✓
Turkey		✓
United Kingdom – Wales		✓ (maintained settings such as school-based nurseries)

Notes:

1. In which ECEC and primary schools are on the same premises or provided in the same building.
2. In Austria, pre-primary education for six-year-olds who are not ready for school yet is part of primary school.
3. In Croatia, preschool programmes are only integrated with school in areas without kindergartens.
4. In Ireland, junior and senior infant classes for four and five-year-olds are part of primary school, while the preschool ECCE scheme is not. Children aged four can either attend a junior infant class or the preschool ECCE scheme.
5. In Portugal, it is most common that schools and pre-primary education are integrated; however, schools and pre-primary education can be completely separate too (not integrated) or pre-primary, primary and secondary education can be integrated.
6. In Switzerland, kindergarten is, from an institutional point of view, an integrated part of primary school but is not always provided on the same ground or in the same building.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

Table 2.3 Most, but not all, children start both compulsory and primary education at the age of six (2016)

Compulsory and primary school starting age, in years

Country	Start compulsory education	Start primary education
Austria	6	6
Belgium – Flemish Community	6	6
Canada ¹	6	6
Chile	5	6
Colombia	5	6
Croatia	5	6
Czech Republic	6	6
Denmark	6	7
Finland	6	7
Germany	6	6
Greece	5	6
Hungary ²	3	6
Ireland ³	6	6
Italy	6	6
Japan	6	6
Kazakhstan ⁴	6	6
Luxembourg ²	4	6
Mexico	3	6
Netherlands	5	6
New Zealand	6	5
Norway	6	6
Poland	6	7
Portugal	6	6
Slovak Republic	6	6
Slovenia	6	6
Spain	6	6
Sweden ⁵	7	7
Switzerland	4	6
Turkey	6	5,5
United Kingdom - Wales	5	5

Notes: The start of primary school refers to the start of ISCED 1 (Grade 1 or the first class in primary school) and does not refer to pre-primary education (ISCED 02) or pre-primary education (ISCED 02) that is part of primary school.

1. Data for Canada refer to the most common primary education starting age and most common compulsory school starting age. Exceptions are New Brunswick where compulsory education starts at the age of 5, Saskatchewan where compulsory and primary education starts at the age of 7 and Manitoba where primary education (Early Years) begins at Grade 1 and school is compulsory at age 7, or 6 years of age but turning 7 on or before December 31 of that year.

2. In Hungary and Luxembourg, primary school starting age depends on date of birth and school maturity and can be at 6 or 7 years.

3. In Ireland, statutory maximum school starting age is 6 years (in first class of primary school) but children in Ireland start primary school at the age of 4 or 5 years (in junior infant or senior infant classes).

4. In Kazakhstan, compulsory education can start at the age of 6 or 7 years.

5. In Sweden, there are plans to make the preschool class for 6-year-olds compulsory.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

Table 2.4 Level of authority involved in transition policies, by country (2016)

Country	National/federal authorities	Regional/ state	Local	Only setting-level
Austria	✓	✓		
Belgium – Flemish Community		✓		
Canada ¹	✓	✓	✓	
Chile	✓			
Colombia	✓			
Croatia	✓	✓	✓	
Czech Republic	✓		✓	
Denmark	✓		✓	
Finland	✓		✓	
Germany				✓
Greece	✓			
Hungary	✓			
Ireland	✓			
Italy	✓			
Japan			✓	
Kazakhstan	✓			
Luxembourg	m	m	m	m
Mexico	✓			
Netherlands				✓
New Zealand				✓
Norway	✓		✓	
Poland	✓		✓	
Portugal	✓			
Slovak Republic	✓		✓	
Slovenia	✓		✓	
Spain	✓	✓		
Sweden	✓		✓	
Switzerland		✓	✓	
Turkey	✓			
United Kingdom – Wales	✓		✓	

Notes: m = missing.

In all countries, settings decide on transition practices. The above data indicate which authorities can be involved in designing, shaping or steering transition policies at setting level.

1. In Canada, national/federal authorities are involved in transitions through their role in supporting indigenous education on-reserve, including on ECEC.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

Notes

1. Disadvantaged children can be from low-income backgrounds (“economically disadvantaged”), from poor areas or regions, with poorly educated parents and/or with one or more immigrant background parent who may face learning disadvantages due to a different language spoken at home. In some countries, disadvantaged children include those with special needs because of mental or physical health issues (adapted from a definition used by the European Commission: http://ec.europa.eu/dgs/education_culture/repository/education/policy/school/doc/ecec-report_en.pdf).
2. Austria, Denmark, Finland, Japan, Norway, Slovenia, Sweden and Wales (United Kingdom).
3. Canada and Germany and sometimes Austria provided information disaggregated by provinces or Ländern. Hence, there can be close to 60 jurisdictions for some indicators (see Table 2.1 for a list).
4. The Ministry of Children and Family Affairs until 2006.
5. Source details for all the curricular documents mentioned here can be found in the annex to Chapter 4, in Table 4.A.7.
6. A recreation centre is an out-of-school setting for pupils aged 6 to 12 years whose parents are working or studying. These centres stimulate the development and learning of the pupils while offering meaningful free time and recreation. These centres are covered in Lgr 11, the curriculum for preschool class, primary education and recreation centres. Since July 2016, the recreation centre has had its own chapter in Lgr 11, which clarifies the purpose and the core content of the centres.
7. Germany and Canada provided information disaggregated by jurisdiction for this question.
8. These 11 jurisdictions are: New Brunswick (Canada), Nova Scotia (Canada), Prince Edward Island (Canada), Chile, Colombia, Croatia, Denmark, Finland, Kazakhstan, the Netherlands and Poland.
9. Data for Slovenia have been double-counted for both “ECEC and primary schools are usually not integrated” and “pre-primary education and primary schools are commonly integrated” as just over half of preschools are integrated in primary schools, and in the other half of the cases, preschools and primary education are separate.
10. In Chile, a bill has been approved on this although it has not yet been implemented.
11. The 20 countries with available data on retention in the first year of primary school are: Austria, the Flemish Community of Belgium, Colombia, Croatia, Czech Republic, Hungary, Ireland, Italy, Kazakhstan, Luxembourg, Netherlands, New Zealand, Norway, Poland, Slovak Republic, Slovenia, Spain, Sweden, Turkey and Wales (United Kingdom).
12. The Council of Ministers of Education, Canada (CMEC) is an intergovernmental body that provides leadership in education at the pan-Canadian and international levels and contributes to the exercise of the exclusive jurisdiction of provinces and territories over education.
13. Tusla or the Irish Child and Family Agency, is a dedicated state agency responsible for improving well-being and outcomes for children. It represents the most comprehensive reform of child protection, early intervention and family support services ever undertaken in Ireland, and operates under the Child and Family Agency Act 2013 (www.tusla.ie/about).
14. SLO serves as the national institute for curriculum development in the Netherlands. They are an independent, non-profit organisation, bridging the contexts of policy, research and practice.
15. See <http://gov.wales/topics/educationandskills/foundation-phase/action-plan/?lang=en>.

16. For further details on National Parents' Committee (FUB) guidelines for good transitions, please consult their website: www.fubhg.no/brosjyre-om-overgang-barnehage-skole.187505.no.html.
17. Including low-income families, and those given a recommendation by a social work centre for being families with medical, financial or social problems.

References

- Ahnert, L. and M.E. Lamb (2011), "Child care and its impact on young children (2-5)", in: Tremblay, R.E., Barr, R.G. and Peters, R. (Eds), *Encyclopedia on Early Childhood Development*, Centre of Excellence for Early Childhood Development, Montreal, Quebec.
- Anders, Y. (2013), "Stichwort: Auswirkungen frühkindlicher institutioneller Betreuung und Bildung" [Keyword: the effects of early institutional care and education], *Zeitschrift für erziehungswissenschaft*, Vol.16/2, pp. 237-275.
- Arnold, C. (2004), "Positioning ECCD in the 21st century", Coordinators' Notebook, no. 28, Consultative Group on Early Childhood Care and Development, www.unicef.org/southafrica/SAF_resources_posecccd.pdf.
- Bogard, K. and R. Tananishi (2005), "Pk-3: An aligned and coordinated approach to education for children 3 to 8 years old", *Social Policy Report*, Vol. XIX/III, pp. 1-24.
- Burchinal M.R. et al. (2002), "Development of academic skills from preschool through second grade: Family and classroom predictors of developmental trajectories", *Journal of School Psychology*, Vol. 40, pp. 415-436.
- Charlotte Bühler Institut (2016), *Austria Country Background Report on Transitions from ECEC to Primary School*, Charlotte Bühler Institut, Vienna, www.oecd.org/edu/school/SS5-country-background-report-austria.pdf.
- Charlotte Bühler Institut im Auftrag der Ämter der Landesregierungen, des Magistrats der Stadt Wien und des Bundesministeriums für Unterricht, Kunst und Kultur (2010), *Modul für das letzte Jahr in elementaren Bildungseinrichtungen – Vertiefende Ausführungen zum Bundesländerübergreifenden BildungsRahmenPlan* [Module for Children in their Last Year of Kindergarten. Addition to the Austrian Framework Curriculum for ECEC institutions in Austria], BMUKK, Vienna.
- Charlotte Bühler Institut im Auftrag der Ämter der Landesregierungen, des Magistrats der Stadt Wien und des Bundesministeriums für Unterricht, Kunst und Kultur (2009), *Bundesländerübergreifender BildungsRahmenplan für elementare Bildungseinrichtungen in Österreich* [Framework Curriculum for ECEC Institutions in Austria], BMUKK, Vienna.
- Cowan, P. and C. Cowan (2009), "The role of parents in children's school transition", In: R. E. Tremblay, R. G. Barr, R. D. V. Peters and M. Boivin (Eds), *Encyclopedia on Early Childhood Development*, (pp. 1-6), Centre of Excellence for Early Childhood Development, Montreal, Quebec.
- Currie, J. and D. Thomas (1995), "Does Head Start make a difference?", *The American Economic Review*, Vol. 85/3, pp. 341-364.
- Currie, J. and D. Thomas (2000), "School quality and the longer-term effects of Head Start", *Journal of Human Resources*, Vol. 35/4, pp. 755-774.
- Dahlberg, G. and H. Lenz Taguchi (1994), *Förskola och skola – om två skilda traditioner och om visionen om en mötesplats* [Preschool and school – two different traditions and the vision of a meeting place], HLS Förlag, Stockholm.
- Danish Ministry for Children and Social Affairs (2016), *Denmark Country Background Report on Transitions from ECEC to Primary School*, Ministry for Children and Social Affairs, Copenhagen, www.oecd.org/edu/school/SS5-country-background-report-denmark.pdf.

- Department of Education and Skills (2011), *Literacy and Numeracy for Learning and Life*, Department of Education and Skills, Dublin, www.education.ie/en/Publications/Policy-Reports/lit_num_strategy_full.pdf.
- Dobbin, R. (2013), "Transition from ECE to Primary School", sabbatical report, Rahotu School, Rahotu, www.educationalleaders.govt.nz/content/download/53042/441373/file/Margaret%20Dobbin%20Sabbatical%20Report%202013.pdf, (accessed on 12 December 2016).
- Dockett, S., et al. (2011), *Facilitating Children's Transition to School from Families with Complex Support Needs*, Research Institute for Professional Practice, Learning and Education, Charles Sturt University, Albury, Australia.
- Dockett, S. and B. Perry (2007), *Transitions to School. Perceptions, expectations, experiences*, UNSW Press, Sydney.
- Dockett, S. and B. Perry (2006), *Starting School: A Handbook for Early Childhood Educators*, Pademelon Press, Baulkham Hills, Australia.
- Dockett, S. and B. Perry (2001), "Starting school: effective transitions", *Early Childhood Research and Practice*, Vol.3, No. 2: <http://ecrp.uiuc.edu/v3n2/dockett.html>.
- Dockett, S. and B. Perry (eds.) (2001), *Beginning School Together: Sharing Strengths*, Australian Early Childhood Association Inc., Canberra.
- Donaldson, G. (2015), *Successful Futures: Report on the Curriculum and Assessment Arrangements in Wales*, OGL Welsh Government, Cardiff.
- Duncan, G.J. and K. Magnuson (2013), "Investing in Preschool Programs", *The Journal of Economic Perspectives*, Vol. 27/2, pp. 109-132.
- Duncan, G. J., et al. (2007), "School readiness and later achievement", *Developmental Psychology*, Vol. 43/6.
- Fabian, H. and A-W. Dunlop (2006), "Outcomes of good practice in transition processes for children entering primary school", Background paper prepared for the Education for All Global Monitoring Report 2007, *Strong Foundations: Early childhood care and education*, UNESCO, Paris.
- Finnish Ministry of Education and Culture (2016), *Finland Country Background Report on Transitions from ECEC to Primary School*, Department for General Education and Early Childhood Education, Helsinki, www.oecd.org/edu/school/SS5-country-background-report-finland.pdf.
- Finnish National Board of Education (2016a), *National Core Curriculum for Pre-Primary Education 2014*, Finnish National Board of Education, Helsinki, http://www.oph.fi/english/curricula_and_qualifications/pre-primary%20_education.
- Finnish National Board of Education (2016b), *National Core Curriculum for Basic Education 2014*, Finnish National Board of Education, Helsinki.
- Fthenakis, W. E. (1998), "Family transitions and quality in early childhood education", *European Early Childhood Education Research Journal*, Vol. 6/1.
- Furlong, J. (2015), *Teaching Tomorrow's Teachers: Reforming initial teacher education together*, Oxford University Press, Oxford.
- Gordon, N., et al. (2003), "Socially-induced brain 'fertilisation': play promotes brain derived neurotrophic factor transcription in the amygdala and dorsolateral frontal cortex in juvenile rats", *Neuroscience letters*, Vol. 341/1, pp. 17-20.

- Government of Japan (2016), *Japan Country Background Report on Transitions*, Government of Japan, Tokyo, www.oecd.org/edu/school/SS5-country-background-report-japan.pdf.
- Gray, P. (2012), "The value of a play-filled childhood in the development of the hunter-gatherer individual", in D. Narvaez, et al. (Eds.), *Evolution, early experience and human development: From research to practice and policy*, Oxford University Press, New York, pp. 352-370.
- Gray, P. (2009), "Play as a foundation for hunter-gatherer social existence", *American Journal of Play*, Vol. 4/1, pp. 476-522.
- Hirst, M., N. Jervis, K. Visagie, V. Sojo and S. Cavanagh (2011), *Transition to Primary School: A review of the literature*, Commonwealth of Australia, Canberra.
- Isaacs, J. (2008), *Impacts of Early Childhood Programs*, First Focus, Brookings Institution, Washington D.C., www.brookings.edu/research/papers/2008/09/early-programs-isaacs.
- JSC IAC (Joint Stock Company Information-Analytic Center) (2017), *Kazakhstan Country Background Report on Transitions from ECEC to Primary School*, JSC Information-Analytic Center, Astana, www.oecd.org/edu/school/SS5-country-background-report-kazakhstan.pdf.
- Kagan, L. S. (1991), "Moving from here to there: Rethinking continuity and transitions in early care and education", in B. Spodek, and N. Saracho (eds.), *Issues in Early Childhood Curriculum. Yearbook in early childhood education*, Vol. 2, Teachers College Press, New York.
- Kagan, S. L. and K. Kauerz (eds.) (2012), *Early Childhood Systems: Transforming early learning*, Teachers College Press, New York.
- Kellaway, K. (2016), *Transition from E.C.E. to primary school*, Canvastown School, Canvastown, www.educationalleaders.govt.nz/content/download/53115/441909/file/Karen%20Kellaway%20Sabbatical%20Report%202013%20-%20Transitioning%20from%20ECE%20to%20Primary.pdf.
- Kunnskapsdepartementet (2015), *OECD – Thematic Review of Early Childhood Education and Care Policy in Norway. Background report*, Kunnskapsdepartementet, Oslo, www.regjeringen.no/contentassets/6372d4f3c219436e990a5b980447192e/oecd_rapport_2015_kd_web.pdf.
- Kunnskapsdepartementet (2008), *Veileder. Fra eldst til yngst*. [National guide. From the eldest to the youngest], Kunnskapsdepartementet, Oslo, www.regjeringen.no/globalassets/upload/kd/vedlegg/barnehager/veileder/f-4248-fra-eldst-til-yngst.pdf.
- Litjens, I. and M. Taguma (2010), *Revised Literature Overview for the 7th Meeting of the Network on Early Childhood Education and Care*, OECD, Paris.
- Marcon, R.A (2002), "Moving up the grades; relationship between preschool model and later school success", *Early childhood Research and Practice*, Vol. 4/1, pp. 517-530.
- Magnuson K., A. C. Ruhm and J. Waldfogel (2007), "The persistence of preschool effects: Do subsequent classroom experiences matter?", *Early Childhood Research Quarterly*, Vol. 22/1, pp. 18-38.
- Meisels, S.J. (1999), "Assessing readiness", in R.R. Pianta and M.M. Cox (Eds.), *The Transition to Kindergarten*, Paul Brookes, Baltimore, MD.
- Melhuish, E., K. Eryk-Stevens, K. Petrogiannis, A. Ariescu, E. Peneri, K. Rentzou, A. Tawell, P. Leseman and M. Broekhuisen (2015), *A Review of Research on the Effects of Early Childhood Education and Care (ECEC) on Child Development*, CARE, London, <http://ecec-care.org/resources/publications/>.
- Ministry of Education, Science and Sport of the Republic of Slovenia (2017), *Slovenia Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education, Science and Sport, Ljubljana, www.oecd.org/edu/school/SS5-country-background-report-slovenia.pdf.

- Morrissey, T., L. Hutchison and K. Burgess (2014), *The Short- and Long-term Impacts of Large Public Early Care and Education Programs*, ASPE Research Brief, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Washington DC.
- Moss, P. (2013), "The relationship between early childhood and compulsory education: a properly political question", in P. Moss (2013), *Early Childhood and Compulsory Education: Reconceptualising the Relationship*, Routledge, London.
- National Education Goals Panel (1998), *Ready Schools*, National Education Goals Panel, Washington.
- NAE (2015), *Elever i förskoleklass läsår 2014/15* [Pupils in preschool class], National Agency for Education (Skolverket), Stockholm, www.skolverket.se/statistik-och-utvärdering/statistik-itabeller/forskoleklass/elever.
- Norwegian Directorate for Education and Training (2017), *Norway Country Background Report on Transitions from ECEC to Primary School*, Norwegian Directorate for Education and Training, Oslo, www.oecd.org/edu/school/SS5-country-background-report-norway.pdf.
- NOU (2010), *Med forskertrang og lekelyst*, Kunnskapsdepartementet, Oslo, Norway.
- Nutley, S. M., I. Walter and H.T.O Davies (2007), *Using Evidence: How research can inform public service*, Policy Press, Bristol.
- OECD (2017), OECD Family Database, www.oecd.org/els/family/database.htm.
- OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.
- OECD (2015a), *Education at a Glance 2015: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2015-en>.
- OECD (2015b), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264233515-en>.
- OECD (2012), *Starting Strong III: A quality toolbox for early childhood education and care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD (2006), *Starting Strong II: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264035461-en>.
- OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, OECD Publishing, <http://dx.doi.org/10.1787/9789264228368-en>.
- O'Kane, M. (2016), *Transition from Preschool to Primary School*, National Council for Curriculum and Assessment (NCCA), Dublin.
- Opetushallitus Utbildningsstyrelsen (2011), *Onnistunut koulun aloittaminen* [How to make the start in school successful], OPH, Helsinki: www.edu.fi/download/151735_onnistunut_koulun_aloittaminen.pdf.
- Pellegrini, A., D. Dupuis and P.K. Smith (2007), "Play in evolution and development", *Developmental Review*, No. 27, pp.261-276.
- Pellis, S. and V. Pellis (2009), *The Playful Brain: Venturing to the limits of neuroscience*, Oneworld Publications, Oxford.
- Peters, S. (2010), *Literature Review: Transition from Early Childhood Education to School*, University of Waikato, Hamilton, New Zealand.

- Pianta, R. C. and M. Kraft-Sayre (2003), *Successful Kindergarten Transition: Your guide to connecting children, families and schools*, Paul H. Brookes Publishing Co., Illinois.
- Pramling, N. and I. Pramling Samuelsson (Eds) (2011), *Educational Encounters: Nordic Studies in Early Childhood Didactics*, Springer, London.
- Ruhm, C. and J. Waldfogel (2011), "Long-term effects of early childhood care and education", IZA Discussion Paper, No. 6149, Institute for the Discussion of Labor (IZA), Bonn.
- Sammons P., et al. (2012), *Influences on Students' Development in Key Stage 3: Socio-behavioural Outcomes in Year 9*, Institute of Education, University of London, London.
- SOU (Statens offentliga utredningar) (2015), *Mer tid för kunskap – förskoleklass, förlängd skolplikt och lovscola, Slutbetänkande av Grundskoleutredningen* [More time for knowledge – preschool class, extended compulsory schooling and holiday school, final report of elementary school study], SOU, Stockholm.
- Suggate, S.P., E.A. Schaughency and E. Reese (2012), "Children learning to read later catch up to children reading earlier", *Early Childhood Research Quarterly*, Vol. 28/1, pp.33-48.
- Swedish Ministry of Education and Research (2017), *Sweden Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education and Research, Stockholm, www.oecd.org/edu/school/SS5-country-background-report-sweden.pdf.
- Taštanoska, T. (2015), *Študija Eurydice: Ugotavljanje in zagotavljanje kakovosti v izobraževanju, poudarki za Slovenije. Analiza ankete za ravnatelje o samoevalvaciji* [Eurydice study: Quality assurance in education, highlights for Slovenia. Results of the survey on institutions' self-evaluation – heads' reports], paper presented at the conference *Krepitev in evalvacija kakovosti v sistemu vzgoje in izobraževanje*, www.zrss.si/keks/gradivo/Tastanoska-studija-eurydice.pptx.
- UNICEF (United Nations Children's Fund) (2012), *School Readiness and Transitions*, UNICEF, New York.
- Welsh Government (2017), *Wales Country Background Report on Transitions from ECEC to Primary School*, Welsh Government, Cardiff, www.oecd.org/edu/school/SS5-country-background-report-wales.pdf.
- Welsh Government (2016), *Foundation Phase Action Plan*, Welsh Government, Cardiff.
- Whitehead, D. and P. Jarvis (2015), *Too Much Too Soon: Reflections upon the school starting age*, Evidence to the Education Committee, Save Childhood, Cheltenham.
- Whitebread, D. and H. Jameson (2010), "Play beyond the Foundation Stage: story-telling, creative writing and self-regulation in able 6-7 year olds", in J. Moyle (Ed.), *The Excellence of Play*, 3rd Edition, pp. 95-107, Open University Press, Maidenhead.
- Woodhead, M. and P. Moss (eds.) (2007), *Early Childhood and Primary Education. Early Childhood in Focus 2: Transitions in the Lives of Young Children*, Open University Press, Milton Keynes, United Kingdom.
- Zhai, F., C. Raver and S.M. Jones (2012), "Academic performance of subsequent schools and impacts of early interventions: Evidence from a randomized controlled trial in Head Start settings", *Children and Youth Services Review*, Vol. 34/5, pp. 946-954.

Chapter 3

Professional continuity in transitions from early childhood education and care to primary school

How do countries ensure that early childhood education and care (ECEC) staff and primary school teachers are prepared and supported enough to help children transition smoothly to primary education? What systems are in place to help them co-operate with each other and who leads these processes? This chapter explores these key questions for professional continuity in transitions. It provides an overview of policies and practices concerning professional continuity across OECD and partner countries, focusing on staff working conditions, staff pre-service education and professional development, teacher support, and leadership and co-ordination. It describes three main challenges highlighted by participating countries that are contributing to continued gaps in professional continuity, along with a wealth of practical strategies for tackling them. Finally it lists some pointers for policy development as food for thought for countries seeking to improve professional continuity for transitions.

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.

The data collected through the OECD questionnaire on transitions for Italy is published here under the responsibility of the National Institute of Evaluation of the Educational and Training System (INVALSI, Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione).

Key policy messages

Professional continuity is improving, but gaps remain. Research tells us that:

- Qualifications matter, but key transition-related competencies make the difference. These include the ability to create a high-quality pedagogic environment, a good understanding of child development and an ability to praise, comfort and be responsive to children.
- The use of transition practices is less affected by the qualification level of teaching staff, than the content of the credential or degree. Teachers specialised in early childhood development, or with greater experience of transitions, are more likely to use a higher number and a wider variety of transition practices.
- Professional development improves pedagogical and transition practices regardless of teachers' educational background. It is particularly beneficial when conducted jointly for pre-primary and primary teachers. Its effectiveness is also greater when trainings are specific and coherent, and when staff from the same centre participate together.
- Professional continuity requires staff support and an enabling environment – good leadership is the key to providing this.

International comparisons reveal some clear trends

- Teacher training in transitions is not yet universal, but many preschool and primary teachers are being taught about transitions in their pre-service training (17 out of 22 countries for ECEC staff, 15 out of 22 for primary teachers) and in professional development (13 out of 22 countries for ECEC staff, 13 out of 22 for primary teachers).
- Qualification levels required for preschool and primary teachers are becoming more equal in almost two-thirds of countries. In 17 countries both pre-primary and primary teachers require a bachelor's degree, and in 6 countries a master's degree is required at both levels. Qualification requirements still differ in 8 countries.
- Salaries for pre-primary and primary teachers are generally more aligned, though in more than one-quarter of countries, statutory salaries at pre-primary level are on average at least 4% less than those of primary school teachers.
- Pre-primary teachers often have less time for non-teaching tasks – such as planning transitions – than their primary school peers (11 out of 19 jurisdictions). Six countries (Chile, the Netherlands, France, Spain, Scotland and England) already ensure the same time for teaching and non-teaching tasks at both levels.
- Many countries provide additional transition support, but mainly in the form of guidelines, websites or books. Additional staff, such as assistants or advisers, to help facilitate transitions are scarce in all but a few countries (e.g. Austria, Colombia and Japan).

Countries have developed a wealth of strategies to address the professional continuity challenges affecting transitions

Challenge 1. Discrepancies between status and perspectives of ECEC and primary school teachers

- Strategy: Equalise pay for qualified pre-primary and primary school teachers, e.g. Belgium, Korea and the Netherlands.
- Strategy: Align levels and content of initial training, e.g. Sweden provides a common core curriculum for the pre-service education of all teachers of children from ages 1 to 16.

Challenge 2: Lack of relevant training in and support for transitions at both levels

- Strategy: Offer more – and more relevant – transition-specific training, e.g. Victoria's (Australia) project to build teacher and staff capacity for helping indigenous children's school transition.
- Strategy: Meet teacher and staff support needs, e.g. Slovenia's counselling service, which operates directly in kindergartens or schools.

...

Key policy messages (continued)

Challenge 3: Structural hurdles to co-operation and co-ordination

- Strategy: Make legal provisions for the exchange of information, e.g. Austria's recent change to the school law, which obliges children's parents and guardians to share kindergarten reports with the primary school at the time of enrolment
- Strategy: Ensure adequate time and physical conditions for co-operation, e.g. Italy's reorganisation of state schools into comprehensive institutes covering children from 3 to 14 years old.

Several policy pointers arise from this research

- Match demands on staff with resources: ensure that the increased policy attention on transitions not only yields new guidelines and requirements, but also tangible support and relevant training.
- Embrace and support the role of leaders in ECEC and primary schools: leaders' roles are crucial for inter-institutional co-operation and staff professional development in the context of transitions, especially in systems with broad local and setting-level autonomy.
- Ensure that ECEC staff and primary school teachers learn together and from each other: a better mutual understanding of the approaches and goals of both levels, for instance through joint training, can facilitate co-operation and smooth transitions for children.
- Strengthen the evidence base for transition-related training and guidance: research on professional continuity is still limited, but the diversity of approaches developed locally and nationally can yield many lessons.

Introduction

Professional continuity ensures a smooth transition from early childhood education and care to primary school through coherent pedagogical and child development practices. Professional continuity requires that centre leaders, primary school principals, early childhood education and care (ECEC) staff and primary school teachers are prepared for collaboration and transitions in their pre-service and professional training (see Box 3.1), and that they receive relevant and sufficient support (Neuman, 2007). Thus, while professional continuity is crucially dependent on staff training and development, it is also framed by the structural and procedural environment in which they operate. Professional continuity can be seen as a facilitating factor for ensuring continuity of pedagogical practices across transitions, discussed in Chapter 4, and continuity from a child development perspective, as discussed in Chapter 5.

This chapter begins with an overview of the research on professional continuity. It then draws on a literature review, in-depth country reports by 8 OECD countries¹ and 1 partner country (Kazakhstan), a questionnaire completed by 27 OECD countries and 3 partner countries (Colombia, Croatia and Kazakhstan) in 2015 and 2016, as well as the OECD's *Education at a Glance* report (OECD, 2016a), to explore what countries are doing to promote professional continuity (see Annex A at the report for details on the methodology).² It analyses trends in staff working conditions, pre-service training and professional development, teacher support, and leadership and co-ordination. The chapter then identifies three key challenges highlighted by countries and strategies they have developed to address them. It concludes with a selection of policy pointers to inform future policy discussions.

Box 3.1 Key definitions

Throughout this chapter the term early childhood education and care (ECEC) will be used to refer to regulated arrangements that provide education and care for children from birth to compulsory primary school age (in integrated systems), or from birth to pre-primary education in split systems. The International Standard Classification of Education (ISCED) is the reference classification for categorising education programmes and related qualifications by education levels and fields. The latest version (ISCED 2011) has nine levels of education, from level 0 to level 8, where ISCED 0 refers to early childhood education and ISCED 1 refers to primary education. Education programmes at ISCED level 0 are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02). The latter include ECEC centres that provide services for children to support early development in preparation for participation in school and society, and that accommodate children from age three to the start of primary education. The focus of this publication is on ISCED 02 and the terms pre-primary, preschool and ECEC are used interchangeably.

The term “teacher” is used in this report to refer to the person taking the lead in the classroom or playroom in both pre-primary and primary settings, although a variety of other names – such as educators, pedagogues or childcare practitioners – are used in different countries. The literal English translations of the national terms are only used when discussing the specific country. Professional development refers here to any activity, e.g. training courses or workshops designed to develop the skills, knowledge and expertise of ECEC or primary school staff. Pre-service or initial education or training refer to any formal or informal education or training that occurs before ECEC staff or primary school teachers begin working with children.

For more information, see the Glossary and OECD/Eurostat/UNESCO Institute for Statistics (2015), ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications, <http://dx.doi.org/10.1787/9789264228368-en>.

What does the literature tell us about the importance of professional continuity?

Research shows that staff qualifications, pre-service education, professional development, working conditions and leadership characteristics matter for transitions in three ways. First, they affect staff and teachers’ pedagogical practices, instructional approaches and expectations, and therefore have an impact on the overall quality of ECEC. Second, their alignment across levels ensures coherence and allows children who transfer from ECEC settings to primary school to experience a less disruptive transition. Third, these factors are associated with a rise in the use of specific transitions practices, which are the intentional attempts to help ensure smoother transitions by creating support and familiarity (LoCasale-Crouch et al., 2008). In these three ways, they influence the quality of transitions and foster children’s development, well-being and learning outcomes (OECD, 2012).

This section summarises the most recent evidence on the importance of supporting and developing ECEC and primary school staff and leaders for ensuring children’s successful transitions, suggesting policy implications for what types of professional continuity matter and how they can be encouraged. It explores how ECEC and primary school quality, as well as the quality of transitions, are affected by staff and teachers’ qualifications, support for staff, and leaders’ characteristics. It builds on evidence from previous Starting Strong publications and recent literature findings to compare the respective roles of ECEC and primary school staff in preparing children during this period.

Staff pre-service education is key for supporting children’s development

Staff critically influence the process and content quality of ECEC (Pramling and Pramling Samuelsson, 2011; Sheridan, 2009). “[W]ell-educated, well-trained professionals are the key factor in providing high-quality ECEC with the most favourable cognitive and social outcomes for children. Research shows that the behaviour of those who work in ECEC matters and that this is related to their education and training” (OECD, 2012: 144). At primary level too there is a wide consensus in the literature about the importance of teachers’ qualifications as a predictor for student’s performance

over and above school and student factors (Betts, Rueben and Dannenberg, 2000; Darling-Hammond, 2000; Ferguson, 1991; Hawk, Coble and Swanson, 1985; Rivkin, Hanushek and Kain, 1998; Strauss and Sawyer, 1986).

According to a comprehensive German research project, key transition-specific competencies for pre-primary staff and primary education teachers include basic transition-related pedagogical competencies; transition-related observations, documentation, analysis and diagnostics; knowledge of the context of transition, with regard to laws, regulation and frameworks at different levels; and assisting children during transitions (Neuss et al., 2014). A good understanding of child development and an ability to praise, comfort and be responsive to children are also key for high quality ECEC services (OECD, 2012). Neuss et al., (2014) also stress the importance of co-operation with parents; across ECEC centres and primary school, and by social institutions with children and families; attitudes, reflection and professional self-image with regard to transitions; transition-related evaluation supervision and quality assurance; and competencies acquired through independent research or practice. Specialised education and training may also foster process quality dimensions, such as stable, sensitive and stimulating interactions; and staff ability to create stimulating learning environments (Katz, 1983; OECD, 2012; Pramling and Pramling Samuelsson, 2011; Shonkoff and Philips, 2000).

Building on a review of existing literature, Neuss et al. (2014) created a competency-based model of qualifications related to transitions for ECEC staff and primary school teachers. It distinguishes three levels of competency: 1) basic pedagogical competencies (basis); 2) basic pedagogical competencies with regard to transitions (width); and 3) specific transition-related competencies (depth). They argue that without the acquisition of basic pedagogical competencies, it is impossible to understand the issue of transitions and acquire wider competencies that are somewhat related to transitions, or in-depth transition-specific competencies. For instance, the ability to co-operate with parents would be seen as a basic competency, the ability to discuss children's developmental processes with regard to school entry with parents would be perceived as "width", while "depth" would describe the ability to discuss with parents the concrete and impending transition of a child to primary school, the demands of the school, the design of the transition and individual aspects of the child. This section follows this train of thought, acknowledging the importance of more general pedagogical skills as preconditions for successful transitions and transition-specific practices.

Transitions benefit from continuity in staff and teachers' pre-service education

When ECEC staff and primary teachers' pre-service education is aligned, it is much easier to ensure continuity in the service children receive (Day and Russel, 2010). Differences in qualifications and status of ECEC staff and primary school teachers might create tensions and affect relationships and the quality of co-operation. To ensure the quality of ECEC, staff should have a pre-service education level comparable to that of primary teachers, in order to be similarly prepared, and should also have an equivalent professional status (ILO, 2013). This is not always the case, however. In Ireland, for example, preschool teachers are required to have at least one year of post-secondary non-tertiary level training, while primary teachers receive separate training at university level. Studies suggest that this difference in status is reflected during the transition process into the first year of primary school: teachers of the first year of primary do not feel that preschool teachers are properly preparing children for the transition (INTO, 2008; O'Kane and Hayes, 2010). On the other hand, teachers in primary education may well have different expectations to those of ECEC staff for the developmental abilities of children, have a tendency to focus more on pre academic activities and have a limited understanding of ECEC pedagogies (O'Kane and Hayes, 2010).

A study in the United States found that ECEC staff and primary teachers who have an early childhood credential or a specialised ECEC degree make greater use of transition practices than those whose degrees are not specialised in ECEC (Rous et al., 2008). Another study also showed that primary

school teachers who received training in ECEC during their pre-service education are more effective in the early grades and are better equipped with the knowledge of developmentally-appropriate teaching and learning (Britto and Limlingan, 2012). The content of the programme, therefore, seems to have a strong impact on the quality of transitions (Bohan-Baker and Little, 2002; Rous et al., 2008; 2010). In contrast, holding a bachelor's degree or higher did not affect the use of these practices. ECEC teachers with a diploma which focuses on early childhood development or with transition-specific training were more likely to use more transition practices (i.e. communication with parents; open houses; making written records available; facilitating contacts between parents) as well as different types of practices (e.g. individual, group, co-ordination) (Rous et al., 2010).

Children from disadvantaged socio-economic backgrounds struggle more than their well-off peers during transitions and face greater risk of losing the developmental abilities gained during preschool once they reach primary school (LoCasale-Crouch et al., 2008; Melhuish et al., 2015). Teachers' practices are crucial to help children adapt during the transition phase, and they are especially beneficial for children from disadvantaged socioeconomic backgrounds (Schulting et al., 2005). For example, collaborative practices between staff, parents and children can improve equity in education (Melhuish, 2014). Transition practices for diversity are therefore key to help disadvantaged children achieve successful transitions. A case study in Queensland (Australia), found that ECEC and primary teachers who have completed diversity studies as a part of their formal education achieve a higher quality diversity environment (Petriwskyj, Thorpe and Tayler, 2014). These teachers used more complex transition approaches (which recognised diversity, the benefits of a supportive classroom and connectedness) than teachers who had only been exposed to occasional training in diversity (see also Box 3.10 later in the chapter).

Offering joint pre-service education for ECEC and primary school pedagogical staff can help build greater understanding of their respective practices and philosophies, and develop shared knowledge of practices (Neuman, 2005; Woodhead and Moss, 2007). For example, evidence from New Zealand shows that primary school teachers who make links in the classroom between learning in ECEC settings and in primary school are more likely to motivate children and develop their sense of confidence as learners in the new system (Peters, 2010). Such approaches are particularly beneficial for transitions.

Both content and level of teachers' training are important for development, well-being and learning

Pre-service qualifications are a key factor in successful transitions, affecting staff and teachers' pedagogical practices and beliefs and therefore their capacity for preparing and reassuring children during the transition phase. Highly qualified ECEC staff and primary teachers are better placed to foster enriched stimulating environments and deliver the high-quality pedagogy associated with improved learning and well-being (Britto and Limlingan, 2012; Early et al., 2007; Fontaine et al., 2006; Litjens and Taguma, 2010; Phillipsen et al., 1997). Pre-service qualifications may also have a small but significant link with emotional process quality,³ as a recent study in the Netherlands has shown (Slot et al., 2015).

Research shows that the level of education of ECEC staff matters for children development. Staff qualifications are positively associated with ECEC service quality and have a positive impact on children's language and reasoning; on staff-parent relationships and on the quality of playroom activities, interactions and programme structure (Manning et al., 2017). For instance, Burchinal et al. (2002) have shown evidence that the best predictor of the process and environmental quality of ECEC⁴ is that staff hold a bachelor's degree. Faour (2010) also found that in developed countries university degrees are associated with a greater use of child-centred pedagogies and language-stimulation practices.

The level of staff education by itself might be insufficient to explain variation in children's developmental outcomes in ECEC, however (Burchinal et al., 2008; Early et al., 2007; Gialamas et al., 2014). Evidence suggests that the actual impact of staff or teachers' qualifications depends on the training programme's specific characteristics, quality, level, duration, and content (Burchinal et al., 2008; Kagan, Kauerz and Tarrant, 2008; Pardo and Adlerstein, 2015). For instance, there is evidence that among ECEC educators with a four-year university degree, those with a specialised certificate in early childhood development are most likely to improve ECEC classroom quality (Pianta et al., 2005; Sylva et al., 2004; Zaslow et al., 2004). In a ten-country study, Montie, Xiang and Schweinhart (2006) found that the duration of ECEC staff's pre-service education was strongly associated with children's language scores at age seven. Playroom quality also seems to be higher when educators have at least a four-year long university degree (Early et al., 2007; Howes, Phillips and Whitebook, 1992).

Holding credentials in ECEC not only helps staff to have a positive impact on children's future scores in language and cognitive development – it also benefits the quality of the centre (Torquati, Raikes and Huddleston-Casas, 2007). For example, the English Effective Provision of Pre-School Education (EPPE) study found that highly qualified staff have a positive impact on the behaviour of their less-qualified colleagues when working together (Sammons, 2010).

Primary school teachers' effectiveness also seems to be related to certain characteristics of pre-service education (Ehrenberg and Brewer, 1995; Harris and Sass, 2011). While a number of authors found that there is no difference in the effects of holding a Master's degree or a less advanced qualification (Hanushek and Rivkin, 2006; Rowan, Correnti, and Miller, 2002), some others show evidence that high qualifications are positively associated with student achievement when they are subject-specific (i.e. in reading and mathematics) (Ballou and Podgursky, 2000; Croninger et al., 2007; Harris and Sass, 2011). Insights from the Early Childhood Longitudinal Study (ECLS) in the United States suggest that primary teachers who have a degree specialised in elementary education boost students' reading performance, even compared to teachers who have more advanced degrees (Croninger et al., 2007). The effect of teachers' qualifications is still more pronounced when aggregated at the school level: the higher the share of teachers holding advanced degrees in one school, the higher the impact on students' performance (Croninger et al., 2007).

Specialised professional development has a positive impact on the use of transition practices

As ECEC staff and primary teachers' pre-service education levels (however high) may not be sufficient to ensure high quality interactions and pedagogical practices, ongoing professional development can fill in knowledge and skills gaps or update teachers with new insights in specific areas (OECD, 2012; OECD, 2014a). There are two ways in which professional development is important for transitions. Firstly, research finds that professional development is linked to higher quality skills among ECEC staff regardless of their educational background (Burchinal et al., 2002), and therefore to greater child well-being and development across settings. Research on professional development for primary school teachers yields similar results (Angrist and Lavy, 1998; Bressoux, Kramarz and Prost, 2008). Secondly, professional development is key to ensure that all staff and teachers know which are the best practices for successful transitions and that they have a good understanding of the practices and beliefs in both ECEC and primary.

Targeted professional development helps create the conditions for well-managed transitions

Research finds that professional development is linked to higher quality skills among ECEC staff regardless of their educational background (Burchinal et al., 2002). Professional development is vital to inform practitioners of the latest findings on effective practices and curriculum content (Litjens and Taguma, 2010; Sheridan, 2009). Specialised professional development has greater effects on process quality than pre-service education, particularly on collaborative work; support for play;

and support for early literacy, mathematics and science (Assel, et al., 2007; de Haan et al., 2013; Sylva et al., 2007). Evidence from France suggests that a targeted, well-defined and intensive pedagogical training for pre-primary staff has important effects on children's short-term reading outcomes; while specialised workshops raised language scores (Burchinal, 2002; 2012). Professional development that is focused on early childhood development is linked to higher quality in the provision of care⁵ (Siraj-Blatchford et al., 2003; Zaslow et al., 2004). A solid knowledge of developmental psychology in early childhood is a key requirement for competent transition practices appropriate to children's age (Neuss et al., 2014). Honig and Hirallal (1998) show that this factor is more relevant for children's outcomes than staff education level or years of experience.

At primary school level too, professional development for teachers has a positive impact on student's performance. In Australia, the KidsMatter Primary programme, which provides resources and support to staff and teachers on children's mental health and adjustment risk, has been found to improve student well-being and improve student learning during the transition year, as reported by teachers (Hirst et al., 2011). Similarly, larger impacts of professional development have been found by other researchers in France and Israel (Angrist and Lavy, 1998). In a quasi-experimental study on third-grade students in French jurisdictions, Bressoux, Kramarz and Prost (2008) found evidence that professional development had a positive effect on students' scores in mathematics – except for low-achieving students, for whom the effect of class-sizes overshadows the effect of training. They also observed that untrained teachers with subject-specific pre-service education are as effective as those who received professional development.

Professional development opportunities also affect teachers' job satisfaction: the 2013 Teaching and Learning International Survey (TALIS) data show that classroom practice, as well as training in content and pedagogy, has a small but positive impact on primary school teacher's abilities, confidence and job satisfaction (OECD, 2014a). Professional development can have a positive impact on teachers' self-efficacy and their ability to boost students' performance. Support from settings managers also affects staff job satisfaction and performance (Ackerman, 2006). In-service training opportunities can decrease teachers' stress and increase self-efficacy and job satisfaction, especially through programmes that are specialised and targeted (Greller, 2006).

In order to be true learning experiences and to enable positive outcomes, professional development has to be targeted to staff needs (Mitchell and Cubey, 2003). The effectiveness of professional development is greater when it is specific and coherent, and when it focuses on practice, monitoring, and implementation of knowledge (Zaslow et al., 2010). It is also more effective when teachers from the same centre participate together – and when the training is aligned for both pre-primary and primary teachers.

Professional development can facilitate building coherence and continuity across levels

Professional development is key for building coherence and continuity across levels and for ensuring smooth transitions. It allows ECEC staff and primary teachers to understand the links between the practices that are implemented at each level and the need for synergy in children's learning and developmental cycle (Stipek et al., 2017). Professional development can also help ensure that all staff and teachers are kept updated on the best practices for successful transitions.

Staff and teachers' qualifications and training also contribute to smoother transitions through their impact on the use of specific transition practices. Training ECEC and school staff on how to work with families also supports better quality transitions given the importance of home-school connections and the complex set of barriers to family involvement (Shartrand et al., 1997). The notion of having teachers trained in child development theory and practice aims to improve child development outcomes, with improved teacher-child processes and interactions. In a study in the United States, using a nationally representative survey of kindergarten teachers, Early et al.,

(2001) were able to link teachers' characteristics with the use of transition practices. They found evidence that teachers who received training in transition facilitation to kindergarten were likely to use more – and more diverse – transition practices. Training in transitions was found to be more important than education level, years of experience or certification. Similarly, another study found a correlation between professional development focused in transitions and the use of transition practices in preschool (Rous et al., 2008).

Professional development programmes that are addressed to pre-primary and primary teachers together are particularly beneficial for transitions. For instance, in a small community in Alabama (United States) a series of joint workshops and training sessions on language development and literacy were held for preschool and primary school teachers. This training intended to smooth the transition process for children by increasing the understanding of the fundamentals of each level (Emfinger, 2012). In the Australian KidsMatter Primary initiative, teachers, parents and children participate in joint training programmes, and each stakeholder has access to a wealth of resources and tools to ease the transition to primary education (KidsMatter, 2016). This type of integrated pre-service training, which is already being implemented by some countries, implies that pedagogical staff and teachers of various education levels attend the same training courses and thereby obtain the same common core knowledge of theory and practice in teaching (Arnold et al., 2006). It is also useful for the harmonisation of preschool and primary teachers' status and their mutual recognition (Neuman, 2005).

Staff require support and an enabling environment

There are several factors that influence retention rates and children's development and outcomes (OECD, 2014). Apart from their education, there are external factors (such as the working environment, salary and work benefits) that matter for ECEC staff's sense of self-efficacy and their ability to meet children's needs (Shonkoff and Phillips, 2000). Staff need to believe in their effectiveness, and feel able to organise and execute the courses of action needed to achieve the desired results in the class or playroom (Fives, 2003). At both ECEC and primary level, negative self-efficacy perceptions and a difficult working environment affect job and professional satisfaction and are associated with teacher absenteeism and attrition⁶ (Evans, 2001; Ingersoll, 2001; Klassen and Chiu, 2010; Sargent and Hannum, 2005; Skaalvik and Skaalvik, 2011; Zembylas and Papanastasiou, 2004). Huntsman (2008), for instance, finds that low wages affect staff-child interactions and turnover rates. A lack of staffing stability, in turn, may negatively affect child development (CCl, 2006; and see Box 3.2).

Box 3.2 Why stability matters for transitions

There is evidence that staff and teachers' years of experience have an impact on transition practices. Preschool teachers with more than eight years of experience working with preschool children were found to be likely to use more – and more individualised – transition practices (Rous et al., 2010).

Some authors suggest that primary school teachers' experience is positively associated with students' performance (Rockoff, 2004; Leigh, 2010). For example, a study in Australia using panel data finds that years of experience is the most relevant factor to explain primary teachers' effectiveness (Leigh, 2010). For pre-primary level, the effect of experience is less important but it is still present (Bouguen, 2016). There is evidence that the stability of ECEC staff within a school and within a group of children favours confidence and better interactions between staff and children, stimulating children's development, well-being and learning (OECD, 2012).

This means that working conditions can be a facilitating or hindering factor for professional continuity, since co-ordination between the two levels requires stability in the staff in charge. Lack of continuity not only affects transitions, but is also adverse for child development, making staff and teachers' turnover rates of great policy interest (Day and Russel, 2010).

Some other factors also affect job satisfaction directly, including working conditions; leadership; professional development opportunities; mentoring, appraisal and feedback practices; and learning support staff. To varying extents, all these factors are associated with staff and teachers' ability to complete their tasks; interact positively with children; and support and foster children's development (OECD, 2012; OECD, 2014a). These external factors are of great interest because they are adjustable. One of these factors is working conditions (ILO, 2013). Evidence shows that ECEC staff's perception of their working conditions is reflected in their behaviour (Burchinal et al., 2002; Clarke-Stewart et al., 2002; Huntsman, 2008) and has a strong link with primary school teachers' attrition (Borman and Dowling, 2008).

Wages are one of the most relevant factors affecting working conditions, job satisfaction and teachers' effectiveness (Huntsman, 2008; Moon and Burbank, 2004; Murnane and Olsen, 1990). There is evidence that low wages in ECEC affect staff behaviour towards children and increase turnover rates, which has a negative impact on transitions (Huntsman, 2008). Furthermore, low wages prevent skilled professionals from choosing to work as ECEC staff (Manlove and Guzell, 1997) or as primary school teachers (Baugh and Stone, 1982, or Rickman and Parker, 1990). Primary teachers can also be led to change school because of wage variations (Theobald and Gritz, 1996).

Workloads are another factor in job satisfaction. There is evidence that ECEC staff who report having heavy workloads are less effective (De Schipper et al., 2007). At primary level, a heavy workload is also associated with lower effectiveness and self-efficacy (Abel and Sewell, 1999; Betoret, 2006; Kokkinos, 2007; Schwarzer and Hallum, 2008; Skaalvik and Skaalvik, 2007). Workloads are also one of the most important factors in primary teachers' attrition (Smithers and Robinson, 2003; see also Buchanan, 2010).

Studies find that material support, such as transition guidelines, can improve teachers' effectiveness and decrease their stress. In a multi-case study in Finland, Ahtola et al. (2011) examined the factors affecting the implementation of transition practices between preschool and elementary school in two Finnish towns. Their findings suggest that transition practices were affected by the quality of transition guidelines. They found that schools which used more transition practices were located in a town where the local administration had provided more elaborate, comprehensive and clear guidelines. In the best performing town, the guidelines had been the result of a collaborative process between the local administration, staff and parents, whereas in the lower-performing town the guidelines had been imposed more externally, from the national level.

Another way of improving teachers' working conditions is by hiring teaching assistants (Chartier and Geneix, 2006; Finn and Pannozzo, 2004). Learning support staff can have a positive effect on teachers' effectiveness and children's development and outcomes, provided that they fulfil some conditions. Building on the Tennessee's Project STAR, a longitudinal state-wide project in the United States, Gerber et al. (2001) found that students in regular-size classes with a teaching assistant for two or three years performed better in reading tests than those without, or for only one year. An evaluation of the Danish "School Development" programme showed positive effects of teacher assistants on primary school students' well-being and learning, particularly students with special needs (Rambøll, 2011). The study also found that the educational background of assistants had less effect on outcomes than other characteristics, such as practical experience. The positive link between the use of assistants and teachers' job satisfaction and classroom environment were also confirmed by the Deployment and Impact of Support Staff (DISS) project in the United Kingdom (Blatchford et al., 2012). They also found a positive impact on student's learning and behaviour, although no associations were found with academic progress. This limitation is also confirmed by Mujis and Reynolds (2003) who examined data from the "Numeracy Support Assistants" (NSA) programme, and found no effects of the numeracy assistants on low-achievement students' mathematics scores at primary school level.

Leadership is pivotal for supporting staff and teachers, and making transitions work well for children

ECEC managers and primary school principals who want to ensure smooth transitions need to be knowledgeable about the latest reforms and policies and how they can affect the implementation of transitions. They should also be knowledgeable about the importance of early childhood education (Desimone et al., 2004), particularly since collaboration over transitions with other institutions and decisions on professional development are often their responsibility (see the section below on “To what extent are countries ensuring professional continuity?”). Since little research has been done on the direct effects of leadership on transitions, this section outlines the impacts of good leadership on working conditions and children’s outcomes.

Several studies show that ECEC centre quality⁷ is affected by leadership factors (Bloom and Bella, 2005; Grey, 2004; Rodd, 2001; Siraj-Bratchford and Manni, 2007; Vannebo and Gotvassli, 2014). For instance, the evaluation of the EPPE project in the UK found that leaders’ characteristics have an impact on child development and well-being (Siraj-Bratchford et al., 2003; Sylva et al., 1999), as did the Effective Leadership in Early Years (ELEY) study (Siraj-Bratchford and Manni, 2007). A growing body of evidence in the United States suggests that the level of formal education of the heads of ECEC centres is a strong predictor of overall centre quality (Bloom, 1992). The leadership development programme Taking Charge of Change (TCC), a 10-month training for ECEC leaders, was found to be effective in reducing staff turnover and improving communication with families – key elements of developmental continuity during transitions (Talan et al., 2014). Likewise, in an evaluation of the National Head Start/Public School Early Childhood Transition Demonstration Project, Ramey et al. (2000) found that leadership quality was an important factor to explain the variation in the performance of different local programmes. In the most successful ones, leaders were competent, committed and strong; whereas in the less successful, they were less experienced, less able to train and monitor supervising programme staff, and less effective in working with the school and community personnel.

Leaders also affect centre quality through staff composition (hiring and firing staff) and, as mentioned above, through staff professional development opportunities (Branch et al., 2009). In many cases leaders may be involved in determining to what extent an ECEC centre provides support to and stimulates professional development, and whether it covers some or all costs (Ackerman, 2006). Leadership can also foster a high level of staff quality by motivating and encouraging team work and the sharing of information (OECD, 2006; 2012). There is broad evidence that staff job satisfaction is influenced by management practices (Aubrey et al., 2013; Mujis et al., 2004; Teddlie and Reynolds, 2000; Wagner and French, 2010); and that leaders’ decisions have an impact on the levels of staff turnover (Bloom, 1997; Hayden, 1997; Whelan, 1993).

The OECD’s Teaching and Learning International Survey (TALIS) on primary school teachers and principals in six countries highlights the important role of leadership, too. It finds that a stronger engagement in instructional leadership is related to a stronger focus on teacher collaboration in schools, and that instructional leadership is positively related to the reflective dialogue of teachers. In primary schools in which principals are engaged in instructional leadership, teachers more often collaborate and engage in reflective dialogue, as well as in practices where teachers observe other teachers’ classes, and have a shared sense of purpose. Principals who strongly engage with distributed leadership initiatives tend to work with teachers who feel a greater shared responsibility for their school’s issues because they work at a school in which people are willing to support each other (OECD, 2016b).

Leaders also seem to have an influence on primary school students’ achievement. For instance, Dhuey and Smith (2014) estimated the effectiveness of principals in raising maths and reading scores between grades four and seven. Using longitudinal administrative data from British Columbia, they

found that principals' fixed effects were as important as or even slightly more important than teachers' effects on student achievements. Even if some studies show no effect or even a negative correlation between leaders' education and school performance (Ballou and Podgursky, 1993; Clark et al., 2009), there is important evidence that the effectiveness of preschool and primary leaders is dependent on their education level and professional development (Branch, Hanushek, and Rivkin, 2008; Sylva et al., 2010), as well as on their experience (Ballou and Podgursky, 1993; Kontos and Fine, 1989; Philips et al., 1987).

Regarding leader's experience in primary school, Branch et al. (2009) found that tenure slightly increases principal effectiveness with regard to school quality. They measured principal effectiveness by differences in students' mathematic performance and found that length of service is one of the factors explaining principal effectiveness variation. They also found an association between principal quality and changes in the quality of teachers, and that principal effectiveness variation is larger in high poverty and low achieving schools. Likewise, Clark et al. (2009) found in a study in New York City that principals' tenure and primary students' scores in mathematics were positively associated. However, in another study, Dhuey and Smith (2010) showed that leaders' tenure does not seem to affect students' performance when isolated from school, teachers and students factors, although it leads to slight improvements in tests scores when experience is longer than five years at the same school.

Research gaps and avenues for future research

While it is clear from this literature review that a minimum level of staff quality is needed for the development of transition-specific skills and practices, the link to the quality of transitions is often implicit rather than explicit in the literature. There is also little empirical evidence on how these factors influence the use of transition practices. More research is needed into the impact of various qualifications, training approaches, support and leadership on the learning and well-being environment for children, as well as their development around the time they transition to primary school and beyond. Some of this effect may take place through the proxies of pedagogical and developmental continuity, discussed in Chapters 4 and 5.

To what extent are countries ensuring professional continuity?

This section shows how professional continuity is organised in participating jurisdictions. It provides information on the characteristics, working conditions, pre-service training and professional development of ECEC staff and primary school teachers; the role leaders and principals play; the support staff receive; and how different institutions co-operate to support them. The data stem from (1) the OECD's *Education at a Glance* report (OECD, 2016a), covering all OECD countries and key partners; (2) country responses to the OECD's survey on transitions between ECEC and primary education; and (3) information provided in detailed Country Background Reports by nine countries.⁸ For further details on the scope and methodology, please refer to Annex A at the end of the report.

Staff characteristics and working conditions vary greatly

As we have seen above, working conditions have an influence on transition quality and continuity. This first section of the international comparisons therefore provides an overview of the workforce and working conditions in the later years of the ECEC system and at primary school.

A greater range of professionals work in ECEC than at primary school

Staff who can work with both ECEC and primary school-age children may facilitate a mutual understanding of pedagogical and instructional practices and may help cater for children's needs in

a more continuous manner, within and outside primary school. Across countries there is a variety of staff types working in ECEC and primary school systems. These include pre-primary and primary school teachers, pedagogues (see Glossary), care workers, educators and counsellors (Table 3.A.1). Broadly speaking, the following categories can be distinguished:

- **Teachers and comparable practitioners:** Pre-primary and primary education teachers have the most responsibility for a group of children in the classroom or playroom. In pre-primary education they may also be called pedagogues, educators, childcare practitioners or pedagogical staff, while the term teacher is almost universally used in primary schools. Data sourced from the OECD's *Education at a Glance* report (OECD, 2016a) exclusively cover this category.
- **Assistants:** Assistants support the “teacher” in a group of children or class. Assistants are more common in pre-primary education than in primary education. They usually have lower qualification requirements than teachers, which may range from no formal requirements to, for instance, vocational education and training.
- **Staff for individual children:** These staff members work with some children only, for example children with special educational needs or those who do not speak the language of the centre or school. They may be in the setting or playroom/classroom every day, or only for selected time slots or lessons.
- **Advisors or counsellors:** Professionals who work across classes and/or playgroups, providing additional guidance and support to teachers, other staff or children, generally or specific to transitions. This category only appears in a few countries.

In the majority of countries, there are at least some staff entitled to work with children of both pre-primary and primary education age. As illustrated in Table 3.A.1, 40% of responding countries (12 out of 30) have teachers (staff leading a class or playroom) who are entitled to work across pre-primary and primary education settings around the time of transition: Canada (with variations between provinces and territories), Colombia, Croatia, Denmark, Finland, Ireland, Kazakhstan, Luxembourg, the Netherlands, New Zealand, Poland, Spain, Sweden and Switzerland. Staff in this first group could, for instance, be pre-primary and primary teachers with overlapping roles for the end of ECEC or the beginning of primary schooling.

In another 43% of responding countries (13 out of 30) there are staff members working across the ECEC and primary school age group who do not have the lead pedagogical role in class or playrooms and who tend to hold a more care-oriented or child development-focused qualification, such as social pedagogues, child and youth workers, or language specialists. In some cases they may be the lead pedagogical staff in ECEC settings, but can only be involved in auxiliary functions or out-of-school care for school-aged children. Some of these countries overlap with the ones mentioned previously: Austria, Colombia, Croatia, Denmark, Germany, Hungary, Kazakhstan, Norway, Slovenia, Spain, Sweden, Switzerland and Wales (United Kingdom). In Slovenia, for instance, preschool teachers can work as “second teachers” in the first year of primary schooling. In other cases, there may be a category of professionals holding an advisory or co-ordination role, such as in Colombia or Slovenia.

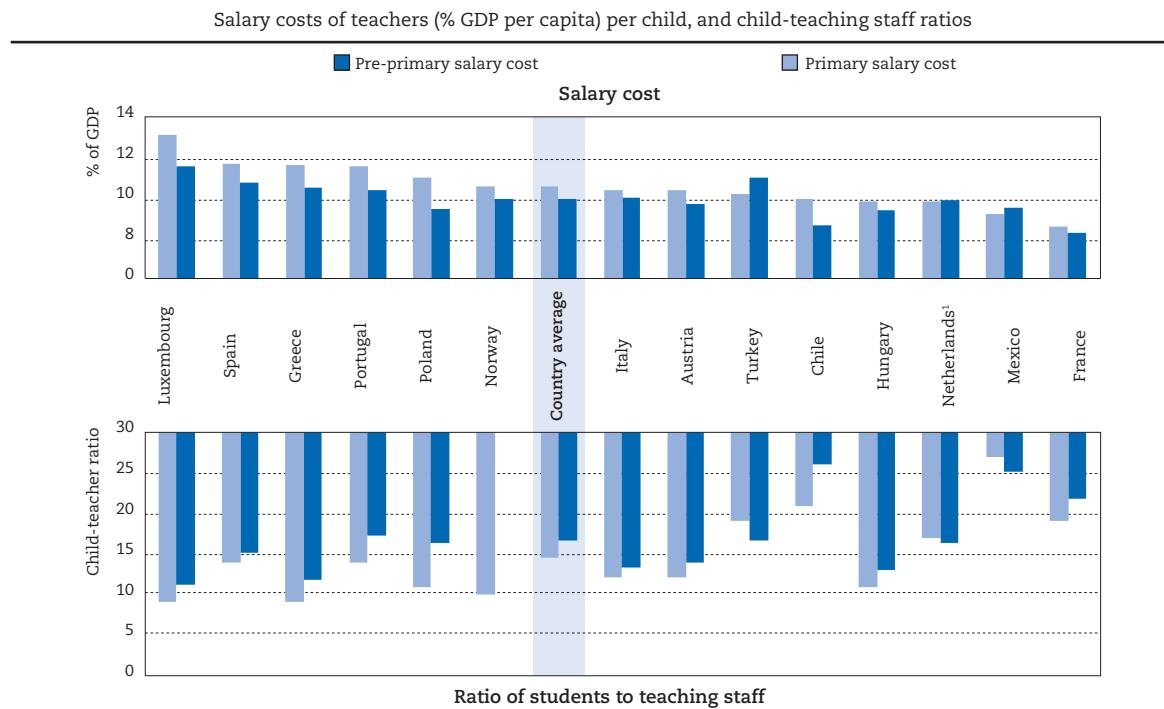
Working conditions still differ across education levels

As indicated in the literature review, working conditions matter for transitions as they can play an important role in retaining qualified staff and ensuring high-quality learning and environments for children. They also affect the relative status of professionals across ECEC and primary schools, and the enabling conditions for co-operation, such as the time available for co-operation and professional development. This means that working conditions can be a facilitating or hindering factor for professional continuity.

While the average statutory annual salaries of pre-primary teachers are only around USD 1 000 (in purchasing power parity), or 4%, below those of primary school teachers across the OECD, there are sharp differences between countries.⁹ In 10 of the 28 countries providing data on this topic,¹⁰ pre-primary teachers earn less than primary school teachers, by more than 30% in Scotland (United Kingdom) and Finland, while they earn slightly more in Australia and Israel (see Figure 3.4).¹¹ In 16 countries salaries are the same. In Israel, one reason for the higher salaries at pre-primary level is that pre-primary salaries increased by more than 40% between 2005 and 2014 as a result of the gradual implementation of the New Horizon reform from 2008. This includes higher teacher pay in exchange for longer working hours. This compares to an increase of 27% at the primary level. In most of the countries with a lower salary at pre-primary level, this is linked to the fact that pre-primary teachers' pre-service education is shorter than for primary school teachers (OECD, 2016a).

In most countries (3 out of 14, 21%), primary teacher¹² salary costs per child exceed the salary costs of pre-primary teachers, despite higher child-teacher ratios on average in primary schools (Figure 3.1). Teachers' salary cost per child is calculated based on teachers' salaries, the number of hours of instruction for children, their number of hours of teaching, and the estimated group size (OECD, 2016a). Even though expenditure per child is slightly higher on average at pre-primary level, the salary cost is lower for pre-primary than for primary in most countries, indicating that teacher salaries make up a smaller share of costs in pre-primary. This can partly be explained by the fact that other staff, such as assistants, play a greater role in ECEC than in primary school.

Figure 3.1 In almost all countries salary costs of primary teachers are higher than those of pre-primary teachers (2014)



Note: Countries are ranked in descending order according to salary cost of teachers per child for primary education. Teacher-child ratios only refer to public institutions and are calculated using full-time equivalents for enrolments (see Glossary).

1. Public institutions only for ratios.

Source: OECD (2016a). *Education at a Glance 2016: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2016-en>.

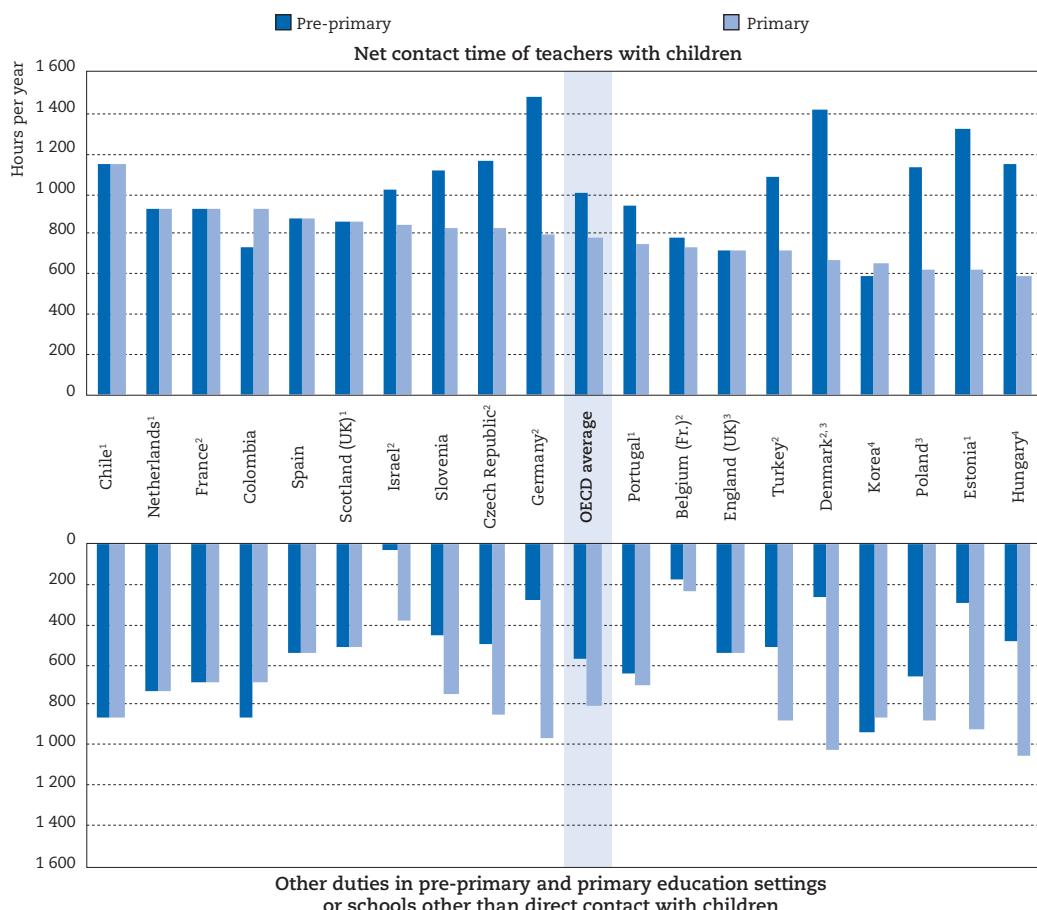
StatLink <http://dx.doi.org/10.1787/888933495529>

While primary school teachers' salaries and working conditions are used as a benchmark here, it should be highlighted that among school teachers across different levels of education, primary school teachers also often have less favourable conditions than their colleagues in secondary education.

For instance, in 2014, primary school teachers with 15 years of experience and typical qualifications earned on average USD 1 732 less per year (PPP) than those in lower secondary education (OECD, 2016a).

There is little difference in the total number of working hours between pre-primary education and primary school teachers (Figure 3.2). There are important differences, however, in how they spend their time – and how much time is available for activities other than direct contact with children, for instance to co-operate with other institutions on transitions. Across countries, pre-primary teachers spend more time than primary school teachers (229 hours a year on average) in direct contact with children. In 58% of jurisdictions (11 out of 19), pre-primary teachers spend more time directly with children than in primary education. The difference between both levels may range from as little as 13 hours in Australia to more than 600 hours in countries like Germany, Norway, Denmark, Slovenia and Estonia. Only in four jurisdictions – Colombia, Mexico, the Flemish Community (Belgium) and Korea – do pre-primary teachers have less contact time than primary school teachers. The time is the same in six countries: Chile, the Netherlands, France, Spain, England and Scotland (United Kingdom). In these countries too, pre-primary and primary school teachers have the same length of initial training.

Figure 3.2 Most pre-primary teachers in the OECD spend more hours in direct contact with children than primary teachers (2014)



Notes:

1. Maximum teaching time.
2. Typical teaching time (in Denmark, for pre-primary level only).
3. Actual teaching time (in Denmark except for pre-primary level).
4. Minimum teaching time.

Countries are ranked in descending order according to the net teaching time in hours for teachers in primary schools. Only countries with available data for both pre-primary and primary level were included. Contact time refers to statutory teaching or contact time in public institutions. Non-contact or non-teaching time covers tasks such as assessing students, preparing lessons, correcting students' work, professional development and staff meetings.

Source: OECD (2017a) Online Education Database, www.oecd.org/education/database.htm.

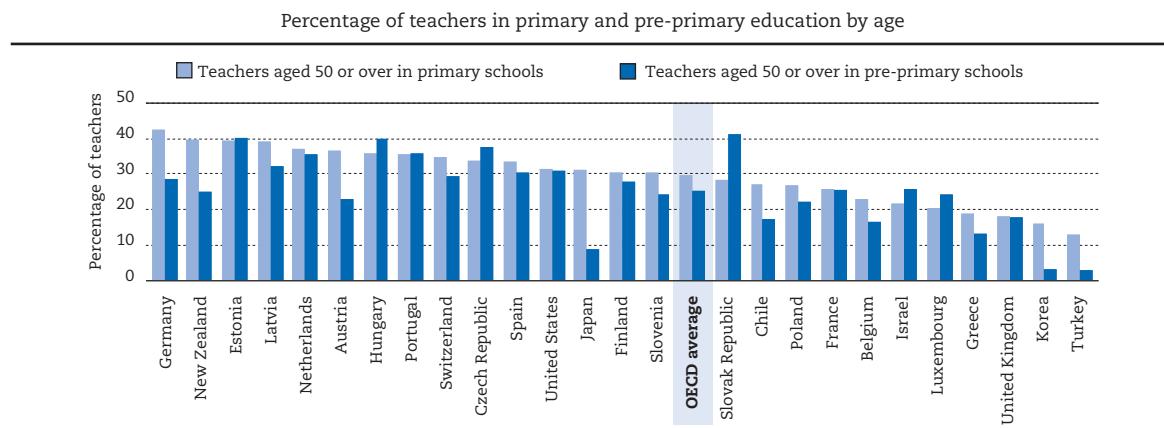
StatLink <http://dx.doi.org/10.1787/888933495539>

These differences across levels can partly be explained by the fact that primary teachers' statutory working time includes tasks other than teaching or direct contact with children to a greater extent than preschool practitioners: more than 800 hours of non-contact time for primary school teachers is the OECD average, compared to less than 600 hours at the pre-primary level. Broadly speaking, similar salary and qualification levels in pre-primary and primary education are also reflected in similar working time arrangements (OECD, 2016a).

As highlighted by the literature review, the years of experience of ECEC staff and teachers matter for how they work with children (Box 3.2). At the same time, an ageing workforce requires additional recruitment and training efforts to replace staff and teachers approaching retirement. The age distribution of pre-primary and primary school teachers is influenced by factors such as the age distribution of the population, the duration of pre-service education, and salary levels and working conditions (OECD, 2016a). It may also be linked to the creation of additional, new positions.

Major differences in the age distribution of pre-primary and primary education teachers are observed across countries, yet differences within countries are often minor (Figure 3.3). On average across countries, primary school teachers are older than pre-primary teachers. In some countries – like Japan, Turkey and Korea – pre-primary teachers are markedly younger than primary school teachers, with more than 40% under the age of 30. These countries have seen strong increases in children's participation in pre-primary education over the past decade (OECD, 2016a). This age group is much smaller in primary education; only in the United Kingdom are more than one quarter of primary education teachers younger than 30 years old. The Slovak Republic stands out for its older pre-primary teachers, with more than 40% above the age of 50. In Germany and Italy many primary school teachers are in this age group (42% and 58% respectively; OECD, 2016a).

Figure 3.3 Pre-primary teachers tend to be younger than primary teachers across the OECD (2014)



Note: Countries are ranked in descending order by percentage of teachers aged 50 or over in primary schools. Only countries with data for both levels are included.

Source: OECD (2017a) Online Education Database, www.oecd.org/education/database.htm.

StatLink <http://dx.doi.org/10.1787/888933495544>

Staff training in transitions is common, but not yet universal

To support children's transitions successfully, staff and teachers require basic pedagogical and co-operation skills, among others, on which to build their transition-related competencies (see the literature review above). The differences in qualification levels also influence the extent to which they perceive each other as equals. It is therefore important to consider both general and transition-specific initial training and professional development. As we shall see below, more than half the jurisdictions provide transition-specific training, though this is more common in initial training

than in professional development, and more common for ECEC and pre-primary staff than for primary school teachers working with the relevant age group. At the same time, a large number of countries have also aligned the qualification levels of pre-primary and primary education teachers. The sections which follow expand on these findings.

Pre-service education levels are increasingly aligned, but do not necessarily include transition modules

Content and level of pre-service education are both key for ECEC and primary school staff's acquisition of the knowledge and skills required to work successfully with children during the transition period and beyond. Aligned qualifications across pre-primary and primary education levels can facilitate mutual understanding and co-ordination and put staff on an equal footing. This does not mean that the content of pre-service education should be the same at both levels. Teachers working with children aged 0-6 and those working with older children require different competencies, but bridges across their programmes are needed to ensure continuity for children.

Comparing the general level of education required for teachers in both sectors, OECD data show an alignment in the majority of countries, with more and more countries requiring their pre-primary teachers (i.e. the pedagogical ECEC staff taking the lead in the classroom or playroom) to now acquire a bachelor or even master's degree, just like their primary school peers (Table 3.1; Table 3.A.2, on the web only). This is also reflected in a convergence in the duration of pre-service education for both levels (Figure 3.4).

Table 3.1 In most countries both pre-primary and primary pedagogical staff require a similar level of qualifications (2013)

Both pre-primary and primary education teachers complete education with a Bachelor's degree (N=17)	Both pre-primary and primary education teachers complete education with a Master degree (N=6)	Pre-primary and primary education teachers complete education with different degree levels (n=8)
Australia, Chile, Greece, Hungary ¹ , Israel, Japan, Korea, Luxembourg, Mexico, Netherlands, Norway, Poland, Scotland, Spain, Switzerland, Turkey, United States	England (United Kingdom), France, Iceland, Italy, Poland, Portugal	Austria, Czech Republic, Estonia, Finland, Germany, Slovak Republic, Slovenia, Sweden

Notes: Countries with missing data were omitted from this table. A more comprehensive overview of teacher education can be found in Table 3.A.2 on the web.

1. Year of reference 2014.

2. Year of reference 2015.

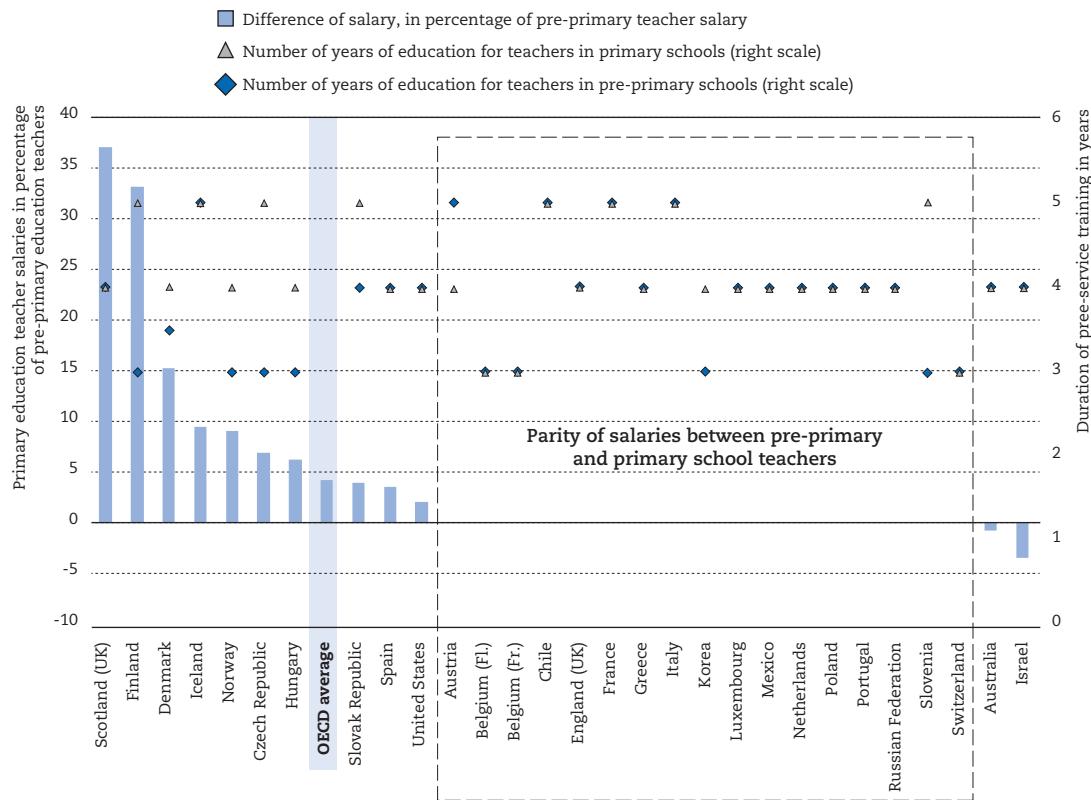
Source: OECD (2014), *Education at a Glance 2014*. See Education at a Glance Annex 3 for notes (www.oecd.org/edu/eag.htm). For duration and level of pre-service education in Portugal: Ministry of Education, for duration of pre-service education of primary teachers in Austria: Ministry of Education. For level of pre-service education of primary teachers in Korea and Japan: OECD (2017b), Starting Strong 2017: Key OECD indicators on early childhood education and care.

The duration of pre-service education is also becoming more aligned (Figure 3.4). While this can help engender mutual understanding and respect between settings, budget constraints mean some governments may hesitate to raise qualification levels for ECEC teachers as higher wages will follow, raising the costs of ECEC services (OECD, 2012; Siraj and Kingston, 2015; see also Figure 3.1). Of the 16 countries where salaries are aligned, all but 3 also have the same duration of pre-service training at both levels. Only in two countries where training duration is aligned, Scotland (United Kingdom) and Iceland, do primary school teachers earn over 5% more than pre-primary teachers (OECD, 2015).

As shown in Table 3.A.1 in the annex to this chapter, the ECEC workforce tends to be more diverse and include some less qualified staff categories than the workforce of primary schools (OECD, 2012). The table for instance shows that in Austria, Colombia and Slovenia, additional auxiliary staff such as assistants are involved at the ECEC-level, while this is not the case for primary school. The diversity of the sector may also raise equity issues related to staff qualifications. Wales (United Kingdom), for instance, reports that often the most deprived areas struggle to attract qualified and skilled professionals.

Figure 3.4 Countries are increasingly aligned in their salaries and years of education for pre-primary and primary teachers (2013)

Salary gap (%, left-hand axis) and number of years of education (right-hand axis)



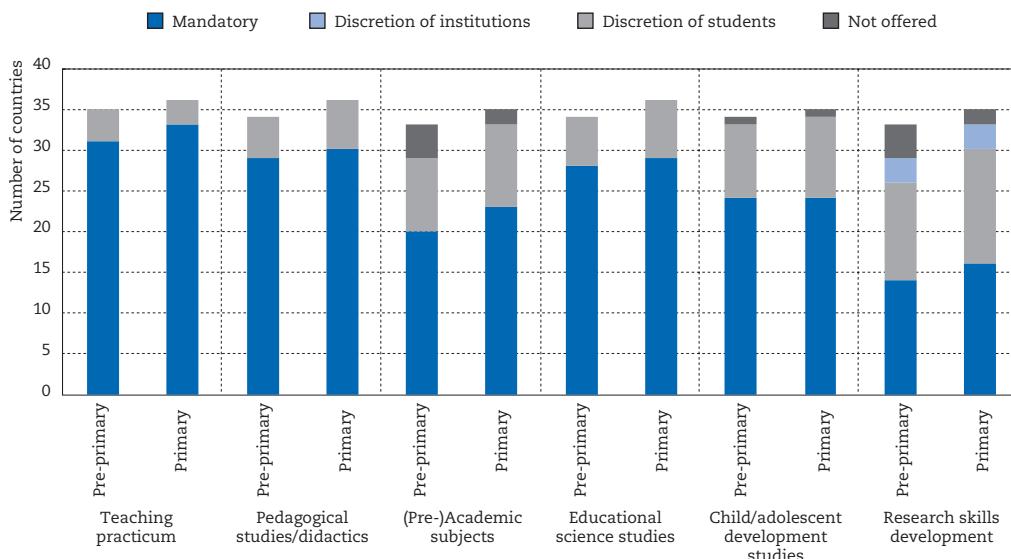
Note: Countries are ranked in descending order by the gap in statutory salary between pre-primary and primary school teachers, i.e. primary school teachers in countries on the left hand side earn more than pre-primary teachers.

Source: Table D3.1a, OECD (2015), *Education at a Glance 2015: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2015-en>; Tables D6.1a and b, OECD (2014b), *Education at a Glance 2014: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2014-en>; for duration of pre-service education in Portugal: Ministry of Education; for duration of pre-service education of primary teachers in Austria: Ministry of Education.

StatLink <http://dx.doi.org/10.1787/888933495550>

There are also major overlaps in the content of pre-service education of both pre-primary and primary teachers (Figure 3.5). At both levels, teacher training institutions have more discretion over whether they offer child or adolescent development studies and research skills than they do over, for instance, pedagogical studies and teaching practicum. As discussed in the literature review, training future teachers in child development studies has been found to be beneficial for transition practices and the learning and well-being environment provided to children. Thus, the fact that teaching this subject is not mandatory across the board is of concern. Out of 38 OECD member and partner countries and economies surveyed, 33 require a mandatory teaching practicum for primary teachers, as compared to 31 in pre-primary education. Pedagogical studies and didactics are also commonplace, being mandatory in 30 countries for primary and 29 for pre-primary education teachers. This is followed by education science studies (study of education), which is mandatory in 29 (primary) and 28 (pre-primary) countries, respectively. Academic subjects are mandatory in fewer countries and also more widely offered to primary school teachers (23 countries) than in the pre-primary field (20 countries). The same is true for the area of research skill development (16 versus 14 countries).¹³ When interpreting such system-level data it is important to consider that even the pre-service training of ECEC staff can be decentralised, complicating the task of assessing the importance of transitions in pre-service training for all countries (OECD, 2014b). Germany is a good example (Box 3.3).

Figure 3.5 The content of pre-service training is well-aligned across pre-primary and primary, 2013



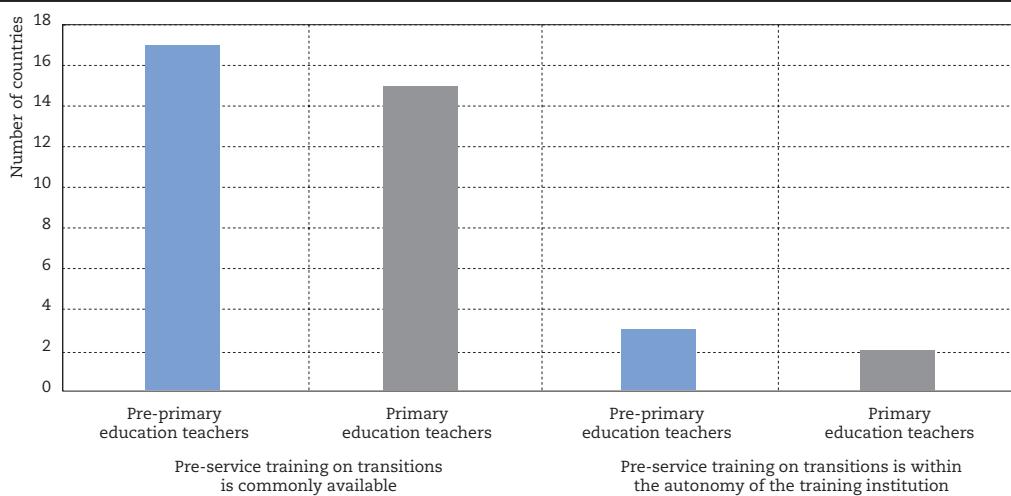
Note: Content areas are ranked in descending order of the number of countries reporting these areas as mandatory. Information on content of pre-service education is based on 38 countries. See Table 3.A.4 on the web only for information by country.

Source: OECD (2014), *Education at a Glance 2014*, Tables D6.3a and b. <http://dx.doi.org/10.1787/888933120252>.

StatLink <http://dx.doi.org/10.1787/888933495561>

In the majority of countries and jurisdictions, it is common to include transition issues in pre-service education for pre-primary teachers, other pedagogical pre-primary staff or primary school teachers (e.g. in Colombia, the Czech Republic, Hungary, Italy, Norway, Poland, Slovenia, Spain, Sweden, Switzerland and Turkey). This training is more common for ECEC and pre-primary staff (in 17 jurisdictions out of 22) than for primary school teachers (in 15 jurisdictions out of 22) (Figure 3.6). The decision on whether to offer such pre-service education on transitions is up to the training institutions in three jurisdictions: the Flemish Community of Belgium, Finland and Ireland, where it is common for primary teachers, but within the hands of training institutions for childcare practitioners.

Figure 3.6 Training on transitions during pre-service education is common (2014)



Note: Information on pre-service training in transitions is based on 23 countries.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495561>

There are some examples that indicate that in terms of pre-service education of staff and teachers, transitions tend to be seen more as the responsibility of the pre-primary sector than the primary school sector. For example, this training is only provided to pre-primary teachers in Kazakhstan, to Early Childhood Educators (*Educadora de Párvulos*) in Chile, and various types of ECEC staff in Japan. The literature also reflects this trend for Germany (Neuss et al., 2014).

Box 3.3 Case study: Decentralised transitions training in Germany

Pre-service education and professional development in Germany are decentralised, reflecting the general governance and provision of education, and particularly ECEC, in the country. In the multiple programmes of pre-service education available for early childhood professionals and primary teachers in the 16 German Länder (there are 601 certified programmes), only a small number of mandatory courses concern the transition to school (Neuss et al., 2014). A survey of ECEC educators (*ErzieherInnen*), ECEC pedagogues (*KindheitspädagogInnen*) and primary school teachers in Germany suggests that almost 80% have dealt with transitions in one way or another during their initial training. However, this number is much lower (63%) for primary school teachers than for their colleagues in pre-primary (83–92%; Neuss et al., 2014). In the vast majority of modules analysed which refer to transitions (96%), transition is not the main topic, but rather embedded in modules on wider issues (Neuss et al., 2014).

The provision of professional development is also decentralised. Government-dependent private ECEC providers (or *freie Träger*) and public ECEC providers (*öffentliche Träger*) are responsible for the further voluntary training of staff in transition. The providers decide on the amount and the kind of training to offer. It is up to the management of ECEC centres and the members of staff to decide if they want to take up these offers. On-site training for an entire ECEC centre is an exception. Standardising professional development and enhancing quality and accessibility have been on the agenda of stakeholders, policy makers and providers for a decade. The 8th Children and Youth Report (*Kinder- und Jugendbericht*) stipulates that co-operative working structures should be built in this area. The transition theme is embedded in seminars, courses, workshops, tutorials on themes like observation/diagnostics, cultural techniques and competences, didactics, methods and planning of every-day life, theories about education and learning, continuity, and concepts and models of collaboration.

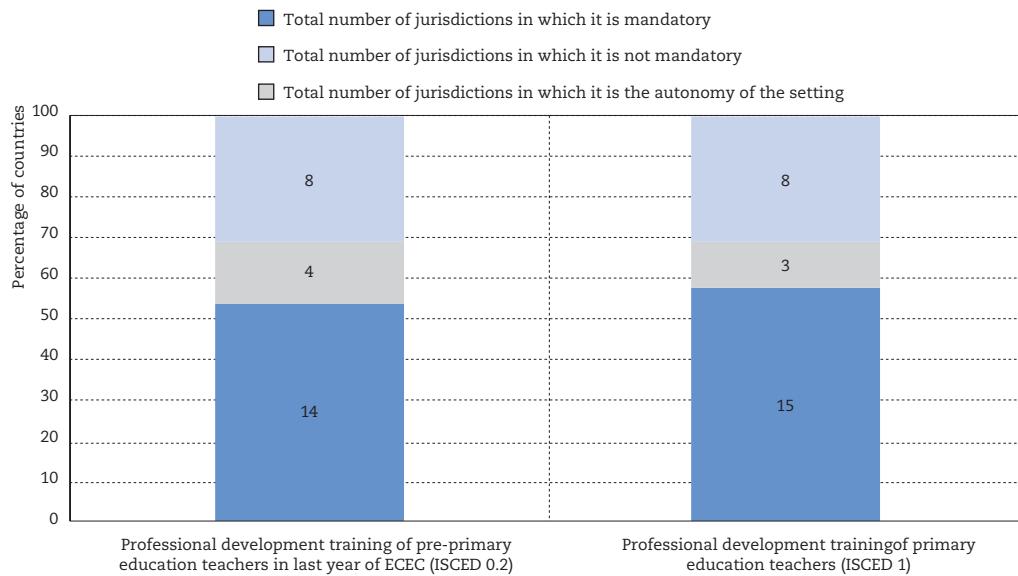
Source: Neuss, N., J. Henkel, J. Pradel and F. Westerhold (2014), *Übergang Kita-Grundschule auf dem Prüfstand – Bestandsaufnahme der Qualifikation pädagogischer Fachkräfte in Deutschland* [Bringing transitions from ECEC centres to primary school to the test – an inventory of the qualifications of pedagogical staff in Germany]; OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

Professional development is widespread and may include transitions

As mentioned in the literature review, relevant professional development (also referred to as in-service training) can improve staff and teacher practices and foster children's development. Specific training is also associated with more diverse transition practices. There are various ways of providing in-service or ongoing education and training to ECEC and primary school professionals. It can take place “on the job” (i.e. in the workplace) or through external providers like training institutes or colleges. The training might take the form of staff meetings, workshops, conferences, on-site consultations, supervised practices and mentoring (OECD, 2012).

General professional development is mandatory in 57% of jurisdictions (15 out of 26) for staff working in the final year of ECEC, and in 62% of jurisdictions (16) for primary school teachers (Figure 3.7). In three jurisdictions the ECEC setting decides whether or not professional development is mandatory; this is true for two jurisdictions at primary level. Few countries regulate the minimum duration of professional development per year. In some countries, primary and pre-primary teachers alike are required to participate in the same number of hours of training a year (e.g. 120 hours in Turkey, 40 hours in Mexico and Slovenia, and 8 hours in Luxembourg). In Hungary it is 120 hours over 7 years for both groups. While not mandatory, a collective agreement in Sweden provides an entitlement of 104 hours of professional development to preschool and primary school teachers. In Wales (United Kingdom) there is an entitlement of 37 hours for primary school teachers and learning support staff within schools (see Table 3.A.5 on the web only). An example of training for less qualified staff in Wales is provided in Box 3.4.

Figure 3.7 Professional development requirements vary little for pre-primary and primary teachers (2014)

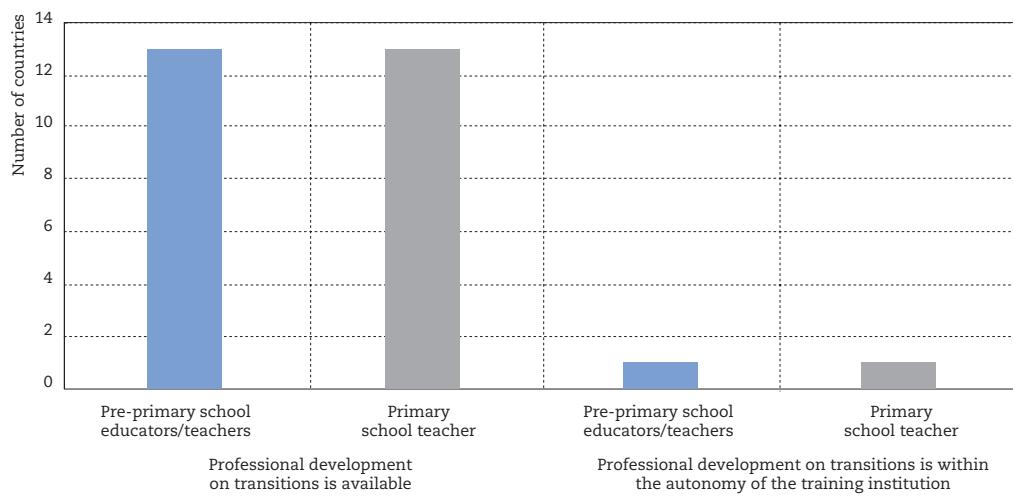


Note: Information on general professional development is based on 26 countries.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495593>

Figure 3.8 The majority of countries studied include transitions in professional development training (2014)



Note: Information on professional development in transitions is based on 22 countries.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495597>

Professional development training on transitions is slightly less widespread than in pre-service training across jurisdictions. Of the 22 jurisdictions that responded, 13 reported that professional development in transitions is common for pre-primary school teachers or other staff (59%). Thirteen countries also reported that professional development in transitions is common for primary school teachers (Figure 3.8). In one jurisdiction, the Flemish Community in Belgium, this type of professional development is at the discretion of the training institution. Only in a very few

countries (Spain and Turkey) are pre-primary and primary school teachers obliged to participate in professional development on transitions. In Croatia, such training is stipulated by the Act on Preschool Education, and organised by the *Education and Teacher Training Agency* and legal entities authorised by the minister. In 15 jurisdictions, transitions training is available and staff may choose to participate in it, while in several other jurisdictions such offers are determined at the local level. Neither Mexico or New Zealand train their pre-primary or primary teachers in transitions as part of their professional development. However in New Zealand, other work is done to develop teachers' practices related to transitions.

Box 3.4 Case study: Professional development for childminders in Wales (United Kingdom)

In Wales (United Kingdom), the Association of Childcare and Early Years (PACEY) Cymru strives to raise standards within the sector and provides a range of support to assist with the continuous professional development of individual childcare practitioners. A case study of a registered childminder illustrates the benefits of PACEY Cymru support and guidance. This childminder delivers Flying Start-funded childcare in Cwmbran. They have accessed a range of PACEY Cymru training and support, from initial pre-registration training and guidance to newly registered support, and by regularly attending PACEY Cymru events, such as regional or local meetings, where they have contributed to discussions and shared their experiences with peers. Other sources of information include, for instance, practice guides and "how to" videos, which are also available on the topic of transitions. PACEY Cymru has helped them to work towards a Level 5 Children's Care Learning and Development qualification, allowing them to move from an intermediate level (Level 3) to Foundation Level. This is also helping them to progress their knowledge and reflect on practice. As a result, they were able to reflect more deeply on ways to support a specific Flying Start-funded child in their transition into school. Strategies adopted included discussing the transition with the child with the support of books and other resources; visiting the school to familiarise the child with the environment; introducing school uniforms and bags to the "home corner" within the setting, to build familiarity and support role play opportunities on the theme of school; introducing packed lunches as an opportunity to introduce new routines; and working in partnership with the school teacher to increase their understanding of the individual child. Together they discussed the child's development, and completed the Flying Start Baseline Record. This approach led to the development of a transition policy which will benefit all children and families accessing the service. The feedback from the school has been positive and helped with planning in advance of the child starting. It noted that good working relationships between childcare and schools are paramount to a smooth transition for the children involved.

Source: Welsh Government (2017), *Wales Country Background Report on Transitions from ECEC to Primary School*, Welsh Government, Cardiff, www.oecd.org/edu/school/SS5-country-background-report-wales.pdf.

Support to staff is still limited

With much importance attributed to the crucial transition period, some countries provide additional resources to staff to guide and support their work. Support resources and strategies for staff and teachers may be regulated or encouraged nationally, such as in Wales (United Kingdom), but can also be predominantly in the hands of local authorities, as in Denmark. Support can take the form of additional staff and advisers, guidelines and materials, as well as overarching support structures. Such support may specifically target transitions or be broader, while including support to transitions. A strong focus for additional support across countries appears to be related to children with special needs or from disadvantaged backgrounds, i.e. to equity in transitions. This is in line with research pointing to the specific risks and opportunities of transitions for those children (see Chapter 1).

Additional staff and advisors supporting transitions are scarce

While support materials are commonly available, additional human resources, such as auxiliary staff or advisers to help staff and facilitate transitions are scarcer among the participating countries. However, as discussed in Chapter 5, one important exception is the finding that in more than two-thirds of countries (20 out of 27), children receive support from specialists such as psychologists or social care workers during or after transitions. This support mostly focuses on children with

special needs. Examples of this targeted approach can be found in Finland, Japan and Wales (United Kingdom), whereas a more general approach seems to prevail in Austria, Slovenia and Kazakhstan. Targeted and general approaches may also be combined.

There are several national arrangements for additional staff to support the work with disadvantaged children or those with special needs, which can also be drawn on around the time of transition from ECEC to primary school. In Finland, in some cases there might be an assistant for one or more children, and ECEC and school personnel (teachers, principals, heads of day care centres) co-operate with special needs education, social and healthcare personnel to provide the necessary support for each child (Finnish Ministry of Education and Culture, 2016). In Japan, the national government has implemented a programme to help local governments that are putting in place support systems for children with special needs. This includes the provision of information to the children and their parents/guardians, and guidance and advice to schools. For example, one local government has deployed so-called “Early Support Co-ordinators” (personnel specialised in early childhood education and starting school), who collect information, liaise and co-ordinate with local communities and with relevant departments and organisations on such areas as early childhood education and care, welfare, health and medicine (Government of Japan, 2016). In Wales, each primary school has a co-ordinator who helps during transitions for children with special educational needs or additional learning needs. In many larger primary schools there are dedicated staff responsible for working with families experiencing difficulties or with children from disadvantaged backgrounds, often supported by central funding through the Pupil Deprivation Grant (Welsh Government, 2017).

General additional human resources available for transitions may also be provided, but are often integrated in wider efforts. In Japan, with the 2016 budget, the national government plans to implement a programme for training and deploying roaming early childhood education advisors in each setting to provide guidance and advice, which may also include support to transitions. In Wales (United Kingdom), the main support need concerns the small proportion of children who move from a private or voluntary sector nursery to a primary school, since in the year prior to entering the primary school, the majority of children attend a nursery attached to the school. Arrangements vary locally and additional training and support can be provided by local authorities or regional consortia. In Kazakhstan ECEC teachers may seek assistance from specialists to support the optional parts of the curriculum so as to foster child development and ensure continuity.

In Austria, in addition to training and meetings, staff have access to feedback sessions, internal evaluations as well as scientific findings. These often take place in the context of counselling sessions with specialists or in training. The Network Projects are a key example (see Box 2.6, Chapter 2 and Box 5.5, Chapter 5), which seek to develop local approaches for improving the individual support given to each child and allowing each child to develop his or her skills to the full. However, there are hardly any additional personnel available to help staff with this process, with some exceptions at the state level.

An additional counselling service is also available in Slovenia (see Challenge 2 below), and in Sweden, where additional staff may be called on to enable smooth transitions for children in need of special support. Teachers for special needs education may for example serve as transition co-ordinators, supporting and guiding staff in the receiving school. Student healthcare services covering both the preschool class and compulsory school, among other school forms, may also play an important role in handling contacts with medical or social services (NAE, 2014; Swedish Ministry of Education and Research, 2017; see Chapter 5).

Support materials and guidelines are widely provided

Almost all countries report that various resources guide staff in how to handle transitions and support children. These include transition guidelines, either provided separately by national or

local authorities or integrated in curricula and other documents, or communication materials (see Table 3.A.6 on the web only). While Norway has been developing a national guide targeted to a variety of stakeholders, other countries – like Slovenia – provide guidance predominantly to staff and via the curriculum.

Other written communication materials such as books, flyers or websites are commonly available in Austria, Chile, Colombia, Croatia, Czech Republic, Japan, Kazakhstan, Luxembourg, Poland, Spain and Turkey. In the Flemish Community of Belgium and in Canada this is at the discretion of schools, settings or providers. In Poland, such materials are made available online by the Center for Education Development (*Ośrodek Rozwoju Edukacji*). In Ireland the *Aistear/Siolta Practice Guide* contains a pillar of practice on transitions with information to support practice in early years' settings. In Austria additional resources include information exchange, guidelines and a variety of other materials. Such resources vary from institution to institution and are not regulated, but didactic games, professional literature, workbooks, resources and media etc. may be available. Additional guidelines on transition with a special focus on individualisation and differentiation during the school entry have also been recently developed in Austria. They provide practical guidance using tips, examples and questions for staff self-reflection. The guidelines are already in use in primary schools and kindergartens.

Additional guidance is often linked to the curriculum. In Sweden, both the curriculum for the preschool (*Lpfö 98*, revised in 2010), and the curriculum for the compulsory school, preschool class and the recreation centre (*Lgr 11*) provide general guidelines on transitions and emphasise the importance of co-operation between ECEC-settings and primary school. In addition, the National Agency for Education (*Skolverket*, 2014) has also produced support material containing suggestions on possible local transition action plans, also concerning the preschool class. However, given the decentralised nature of the Swedish education system, it is difficult to indicate any specific common practice (Swedish Ministry of Education and Research, 2017) (see also Chapter 4). In Portugal, the 2016 curriculum for preschool education also includes a dedicated chapter on transitions. In Germany, less than half of the Länder curricula (*Lehrpläne*) explicitly refer to transitions (Neuss et al., 2014). Slovenia points out that even though the kindergarten curriculum encourages the use of support materials for various activities, including supporting transitions, in practice no special material resources on transitions are available for ECEC staff (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017).

Specific guidelines on transitions are available, at least partly, in the Flemish Community (Belgium). In Canada, this depends on the school, setting or provider, while in Chile guidelines are also available for Early Childhood Educators (*Educadora de Párvulos*) working at JUNJI or Fundación Integra or Municipal Schools, as well as for primary school teachers. More extensive examples can be found in Austria, Japan and Norway (Box 3.5).

Often, no mandatory materials are available, as in Finland, Slovenia and Kazakhstan. While Finland does not mandate staff to use specific materials, ECEC and basic education providers are required to set out practices and co-operation in their local curriculum, in addition to the goals defined in the national core curriculum. A translation of the international "Transition to School Position Statement" is also provided by the National Board of Education (*Opetushallitus*) to help staff create better transition practices (Finnish Ministry of Education and Culture, 2016). In Kazakhstan various materials developed at the local level may be available. This also compares with Slovenia where it is the responsibility of kindergartens and schools to purchase specific support materials for transitions, like didactical material, books or teaching aids. Yet, the guidelines for departmental teaching staff and class community in primary and secondary schools and in student dormitories pay special attention to the first year of schooling and within the context of school experts working groups (*šolski aktivi*) teachers have the possibility to address such issues (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017).

Box 3.5 Case study: Guidelines to support staff and inform transition practices

In Austria, guidelines are available for kindergarten teachers (*Kindergartenpädagogen/innen*) and primary school teachers (*Volksschullehrer/innen*). For instance, one set of guidelines encourage differentiated and individualised measures to best support children from diverse backgrounds and pay attention to learning environments that allow children to have extended opportunities for moving, playing and having space for themselves (Charlotte Bühler Institut, 2016a). Another guideline is available for language assistants and teachers in supporting language development during the transition from ECEC to primary schooling. It attributes a key role to school management for raising awareness of language support across subject areas among school staff. The guideline can also be used by kindergarten teachers to support their work on language development with children prior to transitions (Charlotte Bühler Institut, 2016b).

In Japan, a collection of case examples on transitions has been prepared by the national government and publicised through the prefectures and municipalities for voluntary use. The national government has also encouraged initiatives by local governments and individual schools and facilities, such as by convening a consultative council to prepare a report on seamless transitions from early childhood education to primary education, and by holding meetings of prefectural officials in charge of early childhood education to share best practices in transitions. In 2005, the Japanese National Institute for Educational Policy Research (NIER) compiled teaching material on “Education for Transitioning from Early Childhood to Childhood”. In 2015, the NIER produced a reference document to guide primary schools compiling their own starting curriculum. It has since been widely distributed to prefecture and local-level officials as well as ECEC and primary school settings. In some cases individual teachers and schools disseminate research findings, and some local governments prepare their own training materials, model curriculum and collections of case studies (Government of Japan, 2016).

In Norway, a national guide entitled “From the Eldest to the Youngest” was published by the Ministry of Education and Research in 2008 to strengthen the coherence between kindergarten and school and ensure smooth transitions. It targets municipalities, kindergartens and schools and highlights the importance of kindergartens’ and schools’ co-operation and continuity in ECEC. The guide emphasises the importance of informing parents about legal, practical, structural and content matters relating to school and identifies the child as the most important actor, so that the starting point for development and activities should be the child’s experiences and perspectives. It lists several possible transition activities, such as a “get-to-know-each other” at school or school visits, a buddy system and opportunities for staff across the institutions to get to know each other (Norwegian Ministry of Education and Research, 2008). In practice, a 2010 survey found that this optional guide was used by one-third of kindergartens in their work on transitions (Norwegian Ministry of Education and Research, 2015). The framework plan and the national guide on transitions address coherence for children with special needs, suggesting how to secure continuity through individually adapted learning. The guide also specifies that children with special needs shall have access to special initiatives from the school to provide a stimulating and adapted education (Norwegian Ministry of Education and Research, 2008). An additional guide on transitions for children and young people with special needs or with special education assistance was published in 2014 (Norwegian Directorate for Education and Training, 2014). While additional resources for staff are not provided nationally, the local level may provide resources and advice related to transitions in Norway, discussed in further detail in Chapter 5.

Sources: Charlotte Bühler Institut (2016a), *Individualisierung und differenzierte Förderung in der Schuleingangsphase* [Individualisation and differentiated support in the school entrance phase], www.charlotte-buehler-institut.at/wp-content/uploads/2016/12/Individualisierung-BMB-final-2016-.pdf; Charlotte Bühler Institut (2016b), *Leitfaden zur sprachlichen Förderung am Übergang vom Kindergarten in die Grundschule* [Guideline for language support at the transition from kindergarten to elementary school], www.bmb.gv.at/schulen/bw/abs/Broschu_re_sprachl_Fo_rderung_A4_BE.pdf?5s8z0m; Government of Japan (2016), *Japan Country Background Report on Transitions*, Government of Japan, Tokyo, www.oecd.org/edu/school/SS5-country-background-report-japan.pdf; Norwegian Ministry of Education and Research (2015), *OECD Thematic review of early childhood education and care policy in Norway*, background report, www.regjeringen.no/contentassets/6372d4f3c21943e990a5b980447192e/oecd_rapport_2015_kd_web.pdf; Norwegian Ministry of Education and Research (2008), *Veileder. Fra eldst til yngst. [National guide. From the eldest to the youngest]*, www.regjeringen.no/globalassets/upload/kd/vedlegg/barnehager/veileder/f-4248-fra-eldst-til-yngst.pdf; Norwegian Directorate for Education and Training (2014), *Veileder: Overganger for barn og unge som får spesialpedagogisk hjelp eller spesialundervisning*, [Guide: Transitions for children and young people who receive special education assistance or special needs education] www.udir.no/laring-og-trivsel/sarskilde-behov/overganger-spesialpedagogisk-hjelp-spesialundervisning.

Structural support is scarcer

Structural support may inform and foster professional continuity through regulations and support mechanisms. It may take the form of guidelines for the various practitioners involved, or

legal provisions or established processes for targeting and identifying children's individual needs during the transition period. As discussed in Chapter 5 for Norway, structural support, for instance for the exchange of information between settings and schools, may also be established at the local level.

In Finland, two more general support systems can help during transitions phases:

- 1) A support system for the child's growth and learning, based on the Act on ECEC and Act on Basic Education and including specific sections in the national core curricula (ECEC, Pre-Primary Education and Basic Education) to set the goals and describe the practices needed. Local practices are developed from this basis.
- 2) A system to support student welfare based on the Student Welfare Act 1287/2013, which sets goals for both pre-primary and basic education. Its main ideas are further specified in the national core curricula and in local curricula (Finnish Ministry of Education and Culture, 2016).

In Austria, the 2015 education reform stipulated an enhancement and expansion of the co-operation between ECEC and primary school teachers. It also stipulated the creation of a national basis for the transfer and use of data between ECEC and primary schools for support needs, which should facilitate the holistic assessment of children during the process of enrolment. The documentation of a child's individual development can be incorporated in this process. Financial resources for both training in the school and supervision by the University College of Teacher Education are exclusively available in the context of Network Projects (Charlotte Bühler Institut, 2016c).

In Poland, preschool teachers assess a child's readiness at the end of preschool. The teacher's evaluation forms a report which is shared with the parents. The support of counselling and guidance centres can be requested to evaluate whether the child is ready to transit to school. When parents wish to delay their child's start in school, it is mandatory to seek the help of these centres in assessing this decision.

Leadership and co-operation matter for professional continuity and smooth transitions

ECEC centre leaders and primary school principals can play a crucial role in providing guidance and relevant training to help staff to best ensure smooth transitions for children. As discussed in the literature review, leaders also play a key role in creating favourable working environments and containing turnover, which in turn can improve children's experiences and facilitate the co-operation required for professional continuity. Leaders are often in an important position to establish linkages among different institutions and actors (see Chapter 5). Co-operation itself is an important element in ensuring professional continuity, as it allows key staff members and stakeholders to learn together and from each other to form a shared understanding.

An ECEC centre leader is the person with the highest responsibility for the administrative, managerial and/or pedagogical leadership at the centre level. Centre leaders may be responsible for monitoring children, supervising other staff, making contact with parents and guardians, and planning, preparing and carrying out the pedagogical work in the centre. Centre leaders may also spend part of their time working directly with children. A primary school principal is the official head administrator of the school, who may bear a different title across countries and may or may not also be involved in teaching and other direct work with children (see Glossary).

In most countries, leaders are pivotal in transition and co-operation processes

One role for leaders at both levels is guiding and training their staff in transitions, as well as in designing and organising transition processes and procedures (see also Table 3.A.6 on the web only).

Primary school head teachers or ECEC centre managers commonly inform their staff in meetings about how to handle transitions and how to support children in this process. This is the case in 57% of countries (17 out of 30): Austria, Colombia, Croatia, the Czech Republic, Germany, Greece, Hungary, Japan, Kazakhstan, Luxembourg, Poland, Portugal, Slovak Republic, Slovenia, Spain, Turkey and Wales (United Kingdom). There may be local differences, as in Finland. There are also differences across staff categories or levels of education, with pre-primary teachers being informed in Croatia, Germany, Greece and Japan, and primary education teachers informed in Wales (United Kingdom). Canada, Denmark, the Flemish Community (Belgium), Sweden and Switzerland report that these matters are decided locally, such as by the school or setting. Under the National Quality Framework in Australia, the educational leader in a child care or early learning service has a defined role that includes establishing systems across the service to ensure there is continuity of learning when children transition to school (Australian Government, 2009).

Norway, Sweden, Japan, Slovenia and Austria highlight leaders' important role in coaching and training staff, which may also be conducted jointly for both ECEC centres and primary schools. In Finland and Slovenia leaders are involved in decisions about the best moment for individual children to move to primary school, and conduct related evaluations. In Slovenia, for instance, primary school heads appoint a committee to evaluate children's school readiness and make the final decision on deferred school entry where necessary. They may also take part in these committees themselves. There is also an important role in the implementation of curricula, planning educational activities and providing pedagogical leadership in Norway, Sweden, Japan, Finland, Slovenia and Kazakhstan.

Almost all countries providing Background Reports highlight that it is the ECEC centre heads and primary school principals who are in charge of the co-operation and exchanges among their institutions and staff. This is the case in Austria, Japan, Kazakhstan, Norway, Slovenia and Sweden. In Slovenia, for instance, this is defined as part of the *Annual Work Plan*. Chapter 5 provides further insights into co-operation.

Beyond these cross-country patterns, the way and extent to which leadership roles are defined differ from one country to another. In Norway, the *Framework Plan* and a national guide on transitions specify the leaders' important role in transition, including the co-operation between kindergartens and primary schools (Norwegian Directorate for Education and Training, 2017; Rambøll, 2010). Yet, in practice it is the pedagogical rather than the managerial leader (centre head) in ECEC who takes the main responsibility for planning and deciding the content, and for implementing activities in preparation of the entry to primary school (Norwegian Directorate for Education and Training, 2017; Rambøll, 2010).

In New Zealand, a principal or senior management team typically determines the individual transition policy of a school. In Japan, leaders aim to ensure that staff understand both levels well, and foster continuity and coherence between them (Government of Japan, 2016). In Kazakhstan, heads of ECEC settings develop annual plans of educational activities, which usually include improving transitions between the centre and primary school (JSC IAC, 2017). In Sweden, leaders and principals are in charge of co-operation, but the extent to which transitions are a key element of their leadership and coaching work is less well-known (Swedish Ministry of Education and Research, 2017).

In addition to the roles mentioned above, leaders in Slovenia follow the work of the counselling service and make provisions for co-operation with parents, and in the case of primary school heads, with school health services. For instance, they participate in meetings with parents in the year before children enter school. In practice, heads' role in transitions is largely organisational, including transition activities in the annual kindergarten or school plans and allowing for time for their implementation, while counsellors have the main responsibility for organising transition activities (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017). This is similar to leaders in Finland, who have a key role in providing guidance and taking important decisions, but are not involved in preparing children for transitions themselves (Finnish Ministry of Education and Culture, 2016).

In Wales (United Kingdom), as in other countries, primary school head teachers and leaders of nurseries have overall responsibility for ensuring that their staff have the relevant skills and knowledge to support transitions. Head teachers are responsible for bringing together the school development plans which set out what staff training is needed to respond to the school's circumstances and objectives. This includes any specifics for earlier age classes. Leaders and head teachers are responsible for ensuring that the Foundation Phase for children aged three to seven is delivered effectively. Larger primary schools usually have a separate leader for the delivery of this phase, so the extent to which centre heads are personally involved in supporting staff regarding smooth transitions depends on the degree of responsibility of the phase-specific leader. For instance, in the local authority of Denbighshire a nursery manager embeds the importance of the transition process within the inductions of practitioners. They also include them in regular staff newsletters outlining the importance of good transitions for children's outcomes and how strong transitions strengthen confidence and security (Welsh Government, 2017).

Several countries ensure inter-institutional collaboration to support primary school teachers and ECEC staff

Various actors can co-operate – such as staff and teachers at both levels of education, national and sub-national authorities, or academic institutions – to prepare staff for facilitating successful transitions (see Box 3.6 for an example from Austria). In Japan, for instance, a report by the nationally sponsored Consultative Council for Research and Study on Transitions (幼児期の教育と小学校教育の円滑な接続の在り方に関する調査研究協力者会議」/youjiki no kyoiku to shogakkou no enkatsuna setsuzokuno arikatani) kansuru tyousakenkyokyoryokushakaigi) pointed out that transition-related initiatives should start with collaboration, such as exchanges between teaching staff, and should progressively develop into the organisation and implementation of curricula ensuring educational cohesion from early childhood to later childhood (Government of Japan, 2016). Chapter 5 provides an in-depth analysis of how cross-sectoral co-operation can ensure developmental continuity for children.

In more than one-third of countries (11 out of 30), primary school teachers or ECEC staff can participate in exchange days to learn about each other's work and the environment in which children learn and play. This is the case for some or all staff categories in Austria, Croatia, Germany, Hungary, Japan, Luxembourg, Portugal, Spain, Sweden and Switzerland. Whether this occurs depends on the local, centre, school or provider level in the Flemish Community in Belgium, Canada, Colombia, Czech Republic, Denmark, Finland, Norway, Poland and Slovenia (Table 3.A.6, on the web only). In the German Land of North Rhine-Westphalia, for instance, more than half of ECEC centres and schools reported visits by teachers and ECEC staff, while in Bavaria and Hesse visits by school teachers to ECEC centres were reported by two-thirds of centres (Hanke et al., 2016; Faust et al., 2013).

In addition to visits and exchange days, sharing of information on children across institutions can support staff in their practices. This is widespread in some countries and may either be part of a national strategy or decided locally (see Table 3.A.6, on the web only), as in the Flemish Community (Belgium). In Austria, this has recently been rendered mandatory across the entire country (discussed further in Chapter 5).

Transitions may not be a specific focus of training-related collaborations, but instead one element of broader practices and strategies, as the examples of several Nordic countries suggest. In Norway, there are national strategies in place to ensure qualified staff in both kindergarten and school, for instance by fostering further education for teachers at both levels (Norwegian Ministry of Education and Research, 2012; 2013). In connection with these strategies, national reference groups have been established to secure the interests of different stakeholders in the kindergarten and education sector, respectively. Their collaboration on staff education and training also includes transition from kindergarten to school as necessary (Norwegian Directorate for Education and Training, 2017). In Sweden, education providers are responsible for ensuring that staff at preschools and schools can

participate in professional development. They also ensure that preschool teachers, primary school teachers and other staff at schools and preschools are aware of the regulations concerning the school system. While this may be related to transitions, it cannot be verified (Swedish Ministry of Education and Research, 2017). In Finland, collaboration between ECEC and primary school personnel is often seen as a knowledge transfer from ECEC to primary schools, while some schools also conduct specific transition programmes (Finnish Ministry of Education and Culture, 2016).

Box 3.6 Case study: Co-operation for human resources development and support in Austria

In Austria, authorities, schools and ECEC settings co-operate in various areas (see also Chapter 5). In the context of its regional planning the school authority provides expertise for human resources development, the distribution of material resources and personnel according to demand and for the implementation of support structures. Indeed, training of staff is an important contact point between ECEC settings, primary schools and other authorities. The training and further education for teachers who work in a school setting is planned and organised by the University Colleges of Teacher Education. In some of the federal states these University Colleges also offer training for ECEC staff or training across institutions. Given the growing importance of the topic of transition, a rising number of trainings and networking events have been offered on this topic in recent years. They include content such as parent-teacher conferences, kindergarten portfolios, tips and tools for the transition period, and observations and documentation during the school entry period. Austria has observed a growing interest in transition-related trainings and events aiming at exchanges and understanding across institutions. The responsible authorities at the federal level, as well as public and private providers, are primarily in charge of providing specialist training and professional development for kindergarten teachers.

University Colleges of Teacher Education especially support the clusters of the so-called Network Projects, launched in 2013 (Box 2.6, Chapter 2 and Box 5.5, Chapter 5), through targeted measures. Each school supervisory authority has a budget for support measures for training in specific topics within and across schools. Funded by the Ministry of Education and Women's Affairs, University Colleges of Teacher Education have offered a course on "early language acquisition support" since 2008, which had been taken up by more than 1 000 pedagogues by mid-2015 (Grillitsch et al., 2014). The course includes modules on topics such as scientific foundations observations, analysis and development support related to language acquisition, as well as didactics for early language acquisitions (BMBF, 2014).

Based on an evaluation of the Network Projects, several possible approaches for nationwide implementation are suggested: a framework for co-operation and information transfer between the two education institutions (ECEC and primary school settings) creating structural prerequisites for co-operation, involving all relevant stakeholders equally; ascertaining adequate coaching for this process, in particular for those institutions with little experience in inter-institutional co-operation; offering initial and professional development (also inter-institutional) to support (future) pedagogues. Schools in networks also often employ transition teams.

However, evaluation results also highlight lessons learnt from challenges, such as the need to take into account necessary working time, ensuring sufficient organisational and personnel resources with regard to pupil enrolment; setting up multi-professional teams and involving various relevant groups; and ceasing current "snapshot" practices of determining school maturity in favour of process-oriented diagnosis and early orientation.

Source: adapted from Charlotte Bühler Institut (2016c), *Austria Country Background Report on Transitions*, www.oecd.org/edu/school/SS5-country-background-report-austria.pdf; Grillitsch and Stanzel-Tischler (2016).

In Japan, promoting collaboration among several settings of different providers requires local government support backed by the co-operation of relevant departments, such as the department in charge of early childhood care, the Board of Education and the department in charge of private schools. Typically, a prefectural or municipal board of education formulates basic policies on transitions based on which it provides concrete support, such as organising joint training workshops for teaching staff at ECEC settings and primary schools, establishing a transitions liaison council comprised of individual schools and facilities as well as other officials, implementing staff exchanges, and formulating specific curricula designed for transitions. Supported by local government, each primary school and ECEC setting is required to systematically conduct exchange activities among children and exchanges between teaching staff, as well as draw up a curriculum facilitating transitions and devise teaching methods (Government of Japan, 2016).

What are the common professional continuity challenges and how are they overcome?

While the topic of transitions is gaining attention, and progress has been made towards professional continuity, challenges remain. Learning from the experiences of countries who have tackled issues in designing and implementing transition policies can be instructive and provide inspiration to others. This section explores some common challenges facing countries in their attempts to improve transitions, and outlines the strategies that various countries have used to overcome them (summarised in Table 3.2).

Table 3.2 Challenges and strategies in strengthening professional continuity

Challenges	Strategies
1. Discrepancies between status and perspectives of ECEC and primary school teachers	<ul style="list-style-type: none"> • Equal pay for qualified ECEC staff and primary school teachers • Align the level and bridge the content of pre-service training
2. Lack of relevant training and support on transitions at both levels	<ul style="list-style-type: none"> • Offer more and relevant transition-specific training • Meet teachers' and staff support needs
3. Structural hurdles to co-operation and co-ordination	<ul style="list-style-type: none"> • Make legal provisions for the exchange of information • Ensure time and physical conditions to co-operate

Challenge 1: Discrepancies between the status and perspectives of early childhood education and care staff and primary school teachers

In their country reports and survey responses, several countries highlight that ECEC and primary school staff do not necessarily see eye to eye, and may not always speak the same language. This is attributed to a discrepancy in their status and educational backgrounds.¹⁴ For instance, as we saw above (Figure 3.4), in 10 OECD countries pre-primary teachers' statutory salaries are below those of primary teachers, on average by almost the equivalent of half of an average monthly salary. Countries gave other examples of discrepancies:

- Wales (United Kingdom) reports that the ECEC sector is still poorly paid in the UK, making it challenging to ensure a sufficiently skilled workforce. Even within the sector there are often differing rates of pay, causing disparities in the ability to attract the most skilled practitioners and affecting the quality of provision. The poorest parts of Wales tend to have the least-skilled ECEC staff, so that staff supply becomes an equity issue (Welsh Government, 2017).
- In Germany, studies show that ECEC professionals and primary teachers know very little about the work and pedagogical practices of the other profession. This is in line with their initial training, in which the other professions are only marginally covered (Neuss et al., 2014).
- In Japan there are differences in "philosophies" across levels since the legal status and jurisdictions of the settings, the licences and qualifications of the teaching staff are all different. Since the educational activities of each school and ECEC setting and the teacher and staff education curricula are also different, there can be a lack of shared understanding and awareness of the other's approach (Government of Japan, 2016).
- Similarly, in Austria, training for kindergarten teachers and primary schools is different, with ECEC staff not educated at tertiary level. Upgrading the ECEC qualification could help to put them on a level playing field with primary school teachers, easing co-operation and providing a bridge to early childhood research. In addition, working conditions, forms of employment and salaries differ across providers (Charlotte Bühler Institut, 2016c).

- Slovenia reports that even though both preschool and primary education teachers are educated to tertiary level (bachelor's degree for preschool, master's degree for primary school level), they have different professional identities and understandings of their professional missions. The primary school teacher's mission is to teach, within the limits of the curricula and their goals, whereas the preschool teacher's mission is to support the child's learning and development and to help develop values, attitudes and habits. Preschool teachers perceive kindergartens primarily as a place to educate and bring up children, rather than as a service shaped by external demands linked to the labour market or school readiness (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017; Turnšek, 2002) (see also Chapter 4).

To overcome these challenges, measures to align the working conditions, content and level of qualifications can be useful. Several jurisdictions studied for this report have developed strategies to do so. These are described below.

Strategy: Equalise pay for qualified ECEC staff and primary school teachers

As discussed above, 16 OECD jurisdictions already ensure that teachers' statutory salaries are the same across pre-primary and primary levels (OECD, 2016a). Such alignment boosts preschool teachers' status and may help with the recruitment and retention of qualified staff in the profession. Evidence on alumni from a university in Northern Norway, for instance, indicates that a large share of students of preschool education enter training to become primary school teachers before ever working in ECEC because of the higher salaries (Engel et al., 2015). To justify higher or aligned salaries, the mandatory level of staff education and qualification requirements also need to be considered. Accordingly, the International Labour Organisation recommends setting salaries in pre-primary education at the "same level as the equivalent job in primary education with similar qualifications and competency requirements" (ILO, 2013, p. 21).

- As discussed above, Israel has increased its pre-primary salaries disproportionately more than salaries at primary levels by offering higher teacher pay in return for extended working hours (OECD, 2016a).
- The pay for teachers at both education levels has also been aligned in Austria, Belgium, Chile, England (United Kingdom), France, Greece, Italy, Korea, Luxembourg, Mexico, the Netherlands, Poland, Russia, Slovenia and Switzerland (OECD, 2016a).

Strategy: Align levels and content of initial training

As shown above in Table 3.1, in 21 OECD countries, both ECEC and primary school teachers are required to have the same qualifications – either at bachelor or master level. This indicates that the alignment of qualifications is already widespread, which may ease co-operation between both sectors in the context of transitions. Across countries, it is also evident that various content areas are common in pre-service education at both levels (Figure 3.5). Below, some concrete examples of how alignment can be fostered in practice are provided:

- Japan has already taken some steps to address their observed challenges. For instance, in training courses for kindergarten teachers and for primary school teachers, a number of subjects can be offered jointly across levels. In addition, a certain number of credits obtained in one course may also be allocated to the other. The curricula of kindergarten, primary school and day-care centre teachers are designed to foster mutual understanding. Furthermore, a fast-track procedure is in place allowing experienced teachers to obtain a second teaching license for the other level of education with a reduced number of credits. This process seeks to train more teachers to work across different levels (Government of Japan, 2016).

- In **Slovenia**, pre-service training for preschool teachers goes beyond the usual ECEC age group, allowing preschool teachers to work together with the teacher in the first year of basic school (the ensemble of primary and lower secondary level education), and in after-school classes. The content of initial training covers early childhood to eight-year-olds in kindergartens and other institutions, such as special needs schools. The education includes subjects such as school pedagogy and didactics, developmental psychology and theory of education. The integrated practice element is usually carried out in kindergartens, but in certain cases it may also take place in the first year of basic school (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017).
- In **Luxembourg, France, parts of the United Kingdom** (England, Wales and Northern Ireland) and Ireland, teachers with primary school training and qualifications can work with older preschool children or primary school children. Except in Ireland, preschool and primary teacher pre-service training is the same in terms of content and duration in those countries (European Commission et al., 2014; Neuman, 2005).
- In **Wales (United Kingdom)**, a workforce plan for the early years aims to address these issue of low qualification levels through the support of the EU-funded Progress for Success Programme, which will provide Level 2 to 6 qualifications (i.e. up to bachelor degrees with honours) for anyone aged 25 who is working in the sector. Apprenticeships are also available for younger staff. This plan also seeks to mitigate the shortages of highly skilled practitioners in the most deprived areas, which undermines equity. Specific funding is in place to support schools and early education settings serving children from the poorest backgrounds (Welsh Government, 2017).
- In **Denmark**, the kindergarten class manager will typically be a qualified pedagogue (see Glossary), with the same educational background as the majority of ECEC staff. Since the 2014 reform of the public school system (Folkeskole), pedagogues can also carry out defined teaching tasks with grade one to grade nine or ten students. Likewise, school teachers can perform defined teaching assignments in kindergarten class. From grade one to grade nine or ten, teachers must have a bachelor's degree in teaching (Danish Ministry for Children and Social Affairs, 2016).
- In **Sweden**, all teachers of children from ages 1 to 16 and teachers in after-school programmes follow a common core curriculum and then specialise in an education level or area which interests them (Woodhead and Moss, 2007).
- In **New Zealand**, ECEC services have been transferred into the Department of Education to create an integrated system and to promote the principle of parity between preschool and primary school teachers (Kaga et al., 2010) (see Box 3.7).
- The Step by Step Transition - Primary School Program implemented across the **Central Eastern European and Commonwealth of Independent States countries** establishes an intentional link and overlap in teaching and learning styles between pre-primary and primary levels. Primary school and preschool teachers are trained in the same pedagogical framework, using the same seven core modules: individualisation, learning environment, family participation, teaching strategies for meaningful learning, planning and assessment, professional development, and social inclusion, and are expected to demonstrate the same competencies. Given the different primary school starting ages across countries, the Step by Step curriculum is organised by age, not grade (Akhter et al., 2012).

Box 3.7 Case study: Setting quantitative targets to boost qualifications of ECEC staff in New Zealand

In 2002, New Zealand introduced Pathways to the Future, a 10-year plan to improve early childhood education services. In order to raise the number of qualified registered teachers, the government set targets requiring teacher-led services to have at least 50% or more of their regulated staff as registered teachers by 2007 (today the minimum requirement), and to raise that share to 80% in 2010 and 100% in 2012. The government helped the centres to cover the higher labour costs by increasing the levels of subsidies and by introducing a funding system that rewards those centres with a high share of qualified and registered teachers. Additionally, teacher education places were increased and more scholarships granted to attract more teachers (Meade et al., 2012; ECE Taskforce Secretariat, 2010; Ministry of Education New Zealand, 2013). When the regulation was introduced in 2002, registered teachers made up only 35% of the early childhood education workforce (ECE Taskforce Secretariat, 2010). By 2013, 76% of teaching staff in early childhood education services were qualified teachers (Figure 3.9).

In 2010, the 100% target was reduced to 80% by the government, based on the consideration that eight out of ten is a sufficient ratio of qualified teachers, and subsidies were reduced due to budget constraints (Meade et al., 2012). Nonetheless, in 2013, 94% of teacher-led centre-based services had 80% or more qualified and registered teachers (Ministry of Education New Zealand, 2013). The Teacher's Work Study by the New Zealand Childcare Association compared the teaching and learning in education and care centres which had 50-79% qualified teachers with those with 100% of qualified staff. It found that children in the latter centres benefitted from the higher qualification of staff as the greater pedagogical experience of teachers helped children's cognitive development, e.g. by fostering more complex play and sustained shared thinking (Meade et al., 2012).

Figure 3.9 The rapid growth in qualified and registered early childhood teachers in New Zealand, 2004-2013

Percentage of qualified and registered teaching staff in teacher-led ECE services



Source: Engel, et al., (2015), "Early childhood education and care policy review. Norway", www.oecd.org/norway/Early-Childhood-Education-and-Care-Policy-Review-Norway.pdf.

StatLink <http://dx.doi.org/10.1787/888933495602>

Challenge 2: Lack of relevant training in and support for transitions at both levels

While the majority of jurisdictions reported that training in transitions is available as part of pre- or professional development, gaps remain. Staff and teachers may also not always receive the support they need to help all children in the transition process.

In 22 countries that responded to the questionnaire, training on transitions was not commonly included in pre-service training for primary school teachers in 6 countries, and in 3 countries for pre-primary teachers. Training on transitions was not included in professional development training for primary teachers in 9 out of 23 countries and in 8 countries for pre-primary teachers (see Figure 3.8 above).

Even countries that already offer such training express concerns about the training provision. In Austria there is nearly no opportunity for ECEC staff and primary school teachers to share their views with decision makers on policy matters related to professional continuity, which renders it difficult to tailor support and training to their needs (Charlotte Bühler Institut, 2016c). Japan points out that an outstanding issue is the small number of specialised subjects on transitions in teacher education at both levels (Government of Japan, 2016). Germany reports that in the multiple pre-service education programmes on offer for early childhood professionals and primary teachers in the 16 German Länder, only a small number of mandatory courses cover the transition to school (Neuss et al., 2014; see Box 3.8 for an example). According to a survey of preschool (ECEC) teachers in the United States, only 44% had received information on transitions via workshops or printed materials. About 36% and 39% had received specialised training on respectively the transition to preschool and kindergarten (Rous et al., 2006).

Box 3.8 Case study: Teaching transitions through inter-disciplinary training in Germany

The Pedagogical College Ludwigsburg in the state of Baden Württemberg offers a good practice example of how transition can be addressed in inter-disciplinary pre-service education modules jointly delivered to students seeking to work as primary school teachers or childhood pedagogues. A co-operation seminar on transitions from pre-primary to primary education is conducted by lecturers in primary and pre-primary pedagogy for both the students on the four-year primary teacher education programme and students on the three-year bachelor programme in early childhood education. The seminar integrates various modules from the two programmes and includes transition theories, essentials of transition design, educational philosophy and learning theories in ECEC and primary schools, coping with transitions, essentials of the co-operation between ECEC centres and primary schools, communications and attitude as fundamental aspects of the co-operation, transition-related historical development and institutional embeddedness. As part of the seminar, primary school teacher students participate in short internships in ECEC centres and early childhood education students participate in short internships in primary schools. This should help each to gain a better understanding of the other's profession. Participants also carry out interviews on transitions with children and adults to gain a biographical approach to the topic e.g. by talking to their own parents and grandparents. Students prepare a portfolio that includes their own reflections, and which often reveals their understanding of the complexity of transitions. The seminar also emphasises dealing with risks during transitions and addresses topics like multilingualism and multiculturalism. In this context students work on approaches to support and accompany parents and children, viewing both as being involved in a transition process. It is important to note that only a minority of pedagogical staff in German ECEC centres hold tertiary education degrees.

Source: Neuss, N., et al., (2014), *Übergang Kita-Grundschule auf dem Prüfstand - Bestandsaufnahme der Qualifikation pädagogischer Fachkräfte in Deutschland* [Bringing transitions from ECEC centres to primary school to the test - an inventory of the qualifications of pedagogical staff in Germany]; OECD Network on ECEC, 2016.

In addition to a lack of relevant learning opportunities in some countries, the case studies suggest that it is relatively rare to have comprehensive support mechanisms and structures in place to guide and support staff. In Austria, for instance, the lack of staff and large group sizes mean that teachers struggle to find sufficient time and favourable conditions to best support transitions. This is despite the fact that additional support staff for special educational needs and language learning are in place (Charlotte Bühler Institut, 2016c; see also Chapter 4). Finland also cited a lack of additional staff, while in Japan although there is no explicit provision for additional staff, support may come from other sources (Finnish Ministry of Education and Culture, 2016; Government of Japan, 2016). Approaches to support materials also differ greatly. While some countries provide a wealth of national guidelines, others, like Finland, Kazakhstan and Slovenia, have no mandatory materials in place.

To overcome these challenges, more – and more relevant – training on transitions could be helpful, as could gaining a better understanding of teachers' and staff's actual support needs.

Strategy: Offer more – and more relevant – transition-specific training

- In **Norway**, kindergarten and primary school teacher education covers transitions between kindergarten and schools. A part of kindergarten student teachers' teaching practice in kindergartens is dedicated to transitions and students are encouraged to spend some days of this period in a school. However, primary school teacher students do not have the same opportunity (Norwegian Directorate for Education and Training, 2017).
- In **Slovenia**, a school reform in 1996 extended the length of compulsory education by making school compulsory from the age of six instead of seven. As a consequence, school and preschool teachers had to undergo additional training in teaching first-graders. These educational modules were subsequently integrated into the new pre-service programmes. Slovenia stands out for the provisions made for considering practitioners' voices in professional continuity (Box 3.9; Ministry of Education, Science and Sport of the Republic of Slovenia, 2017).

Box 3.9 Case study: Listening to staff and teacher views on professional continuity in Slovenia

Before changing norms and standards, such as teaching responsibilities and qualification requirements for staff, the Minister of Education will seek the opinion of the teaching unions and the Expert Council for General Education, which consists of at least one-quarter of kindergarten or school workers. Thus teachers have a say through two different channels. Their voices are also heard at the ECEC centre and school-level. Professional development of preschool and primary school teachers is determined in each institution's *Annual Work Plan*, which is then adopted by the kindergarten/school council. The council is the institution's governing body and is comprised of representatives of the municipality, staff and parents, allowing them to have a say on training-related matters. Within this framework, kindergartens and schools decide for themselves which training to participate in, including on transition.

Source: Ministry of Education, Science and Sport of the Republic of Slovenia (2017), *Slovenia Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education, Science and Sport, Ljubljana, www.oecd.org/edu/school/SS5-country-background-report-slovenia.pdf.

- In **Austria**, transition-related training is usual for kindergarten and primary school teachers. Some University Colleges of Teacher Education already offer ECEC pedagogy as a specialisation which equips graduates with the necessary competences and knowledge for managing transitions. Moreover, these colleges also increasingly provide in-service training in the field of ECEC pedagogy, which may help to improve understanding of kindergarten teachers' work. The current curriculum for kindergarten teacher training colleges also explicitly mentions the concept of transition, the promotion of transition competences, the development of competences for the last year of kindergarten and models for settling-in (BAKIP, 2014). In the school year of 2016/17 a new curriculum is set to come into force, including new topics such as co-operation between ECEC and primary school within the scope of the school entry period, and providing models of inter-institutional co-operation (BMBF, 2016). At the practice level, there are attempts to facilitate communication and collaboration through joint workshops or trainings and project initiatives (Charlotte Bühler Institut, 2016c).
- In **Japan**, training on transitions is provided as part of the training at each school and setting and through local government-provided training to deepen awareness and understanding among teaching staff. For example, from the 2014 fiscal year, about half of all local governments have provided training experience in "connections with primary education (including transitions)" to kindergarten teachers with at least ten years' experience (Government of Japan, 2016).

- The State of Victoria in Australia has developed a cross-cutting approach to professional development (Box 3.10).

Box 3.10 Supporting reciprocal visits and professional learning to facilitate transitions to school in the State of Victoria, Australia

In 2016, the Department of Education and Training for the State of Victoria commissioned a project to maintain Koorie¹ children's connection to their culture during and after transition to school. It also aimed to strengthen relationships among teachers, educators, children, their families and communities. The project aimed to build the capacity of both the prior-to-school and school sectors. This involved a professional learning programme consisting of reciprocal visits and professional learning sessions at two sites in Victoria with a high numbers of Koorie children and families.

Free professional development workshops, open to anyone in the local community, complemented the professional gatherings and reciprocal visits and strengthened connections and networks across the prior-to-school and school sectors, as well as the broader child and family service sector. Around 160 people participated in these workshops between March and May 2016.

These processes have proven to be effective in raising awareness of the issues faced by Koorie children and their families and in assisting staff to support them in the transition to school. The project's final report highlighted the importance of building trust through communication. It emphasised that the success of transition processes can be secured through local networking, cross-sector meetings, reciprocal visits in various forms and joint sector professional development opportunities which reflect the local context.

1. Koorie refers here to Aboriginal and Torres Strait Islander people living in Morwell and Mildura in Victoria, Australia.

Sources: Case study prepared by the Australian Department of Education and Training based on Macquarie University, Semann and Slattery and Boon Wuttung Foundation (2016), "Transition to school – supporting reciprocal visits (Koorie focus)"; edited by the OECD Secretariat.

Strategy: Meet teacher and staff support needs

- In Slovenia, a counselling service operates directly in kindergartens or schools. Its role is to support children, parents and ECEC staff in play and teaching; routine activities; the kindergarten climate; children's physical, social, emotional and cognitive development; enrolment of children in kindergarten; the transition to school; and in instances of socio-economic distress. These counsellors (*svetovalni delavec*) are professionally trained psychologists, special educators, pedagogues, social pedagogues, special and rehabilitation pedagogues or social workers. They possess a higher education degree (equivalent to a master's degree) and practical training in a real working environment is a compulsory part of their course. The counselling service works with a variety of stakeholders, including parents. The kindergarten counselling service may co-operate with the counselling service of the primary school, social work centres and medical centres. (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017).
- In the Austrian state of Carinthia, two hours per week of advice and support are provided by a special pedagogue during the transition period to help with co-ordination between kindergartens and primary schools. In special cases additional staff (inclusion or special education teachers, speech therapists or school psychologists) may also be available, for instance to work with children with developmental delays or special needs (Charlotte Bühler Institut, 2016c).
- In Japan, support is available through a variety of channels. The standard class size for first grade is smaller (35 children) than second grade and above (40 children) to allow more careful guidance to be provided to children who are just starting primary school. Local government may also make additional support available. For instance, Yokohama City government deploys full-time child support teachers, while in other municipalities, parents/guardians and university students may participate in classes as assistant supporters. From fiscal year 2016, the national government will introduce a model programme for building local government systems for promoting early childhood education. The aim is to establish

community-based “Centres for Early Childhood Education” to conduct research into the training and deployment of “early childhood education advisors” who travel to each school and ECEC setting to provide guidance and advice. This programme also constructs centres which address transitions (Government of Japan, 2016).

- In the **United States**, two national advocacy organisations set guidelines for teacher training. Policy recommendations from the National Association of Early Childhood Specialists in State Departments of Education (NAECS-SDE) state that training is essential to bridge the gap between early learning experiences and early primary grades. In particular, kindergarten is seen as a transition pivot, which can link the pedagogy, curriculum and policies between the two settings. NAECS’ goal is to prepare teachers and administrators through pre-service training and professional development, as well as to align standards, improve communication between levels, create transition teams in schools, and learning to engage with parents to support the transitions. NAECS has also developed a list of policies to improve child development outcomes in kindergarten, including transition-related support in line with their individual needs (NAECS-SDE, 2013). The National Association for the Education of Young Children (NAEYC) establishes research-based content standards for professional training, including transition issues, especially around communicating with families and joint planning with other educational settings (NAEYC, 2009).

Challenge 3: Structural hurdles to co-operation and co-ordination

Even where guidelines, training and support on transitions are available, structural impediments may hinder co-operation and co-ordination across levels in practice, potentially undermining other efforts to foster professional continuity.

In the majority of countries (13 out of 19), pre-primary school teachers spend a large share of their time working directly with children, leaving less time for other tasks, such as preparing transitions (Figure 3.2). In **Austria**, for example, the long on-site hours for kindergarten teachers mean they need to have professional conversations and carry out consultations in their leisure time. Alongside a lack of financial resources and space to exchange and have conversations, this is seen as a constraint to practices seeking to facilitate transitions (Charlotte Bühler Institut, 2016c). The location of ECEC and primary school provision can be another physical hurdle to continuity (Chapter 5). For instance, more time is required for co-ordination if ECEC settings and primary schools are not located on the same premises.

Another constraint can be legislation on data protection which restricts the sharing of personal data on a child. This is an issue in **Slovenia**, where it hinders primary teachers from obtaining from kindergartens all the information they need on each child. Schools may only obtain information about the children who are in the process of a school readiness evaluation by kindergartens. To circumvent these obstacles, some kindergartens encourage parents to share as much relevant information as possible about their child with the school directly, including information provided by kindergarten teachers. The protection of personal data poses particular challenges for kindergartens that are independent from schools, rather than integrated within them. Slovenia suggests that this challenge is linked partly to the absence of clear guidelines, as well as a lack of training of ECEC and primary school staff in how to handle sensitive personal data (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017; see also Chapters 4 and 5).

Strategies to solve these issues are outlined below. These include creating accommodating legal environments, allowing staff sufficient time to co-operate, and considering physically integrating ECEC settings and schools. Integrated local structures can also aid in co-operation with other sectors and training providers, as the examples of integrated schools or campus models in Wales (United Kingdom), Austria and many Northern European countries suggest.

Strategy: Make legal provisions for the exchange of information

It is important that staff and teachers are allowed to communicate important details to help them to target their practices to best support individual children. But they also need to be aware of the rules governing this information. Neuss et al. (2014) argue that data protection and the handling of data on individual children should be part of staff and teacher training (see Chapter 5). Staff also need clear guidance on what information they are allowed to and supposed to share as the child moves on, and the role parents need to play. In all of this leaders of settings and schools have a key role to play.

- In **Wales (United Kingdom)**, ways of sharing information on children and for joint working between various services are continually being developed in order to improve the quality of transition from childcare to early education. The Early Years Development and Assessment Framework aims to align the various development assessments done on children from ages zero to seven and ensure that these are shared across all relevant services (Welsh Government, 2017).
- In **Austria**, a change to the school law in 2016 obliges children's guardians to share the observations and results of support measures they received from the kindergarten management with the primary school at the time of enrolment. The information gathered on children's development, competencies, interests and gifts facilitates targeted and continuous support (Charlotte Bühler Institut, 2016d).

Strategy: Ensure adequate time and physical conditions for co-operation

As shown in Figure 3.2 above, six countries – Chile, the Netherlands, France, Spain, England and Scotland (United Kingdom) – have already taken steps to ensure that pre-primary teachers have, beyond teaching and contact with children, as much time as their primary school peers for other tasks such as preparation, collaboration and organisational matters.

If ECEC and primary school facilities are separate or ECEC children move on to a variety of different schools, local structures such as transition co-ordinators or counsellors may be needed to ensure information flows between various institutions. Several countries have found ways to improve the physical conditions for co-operation:

- **Slovenia** highlights that communication issues are less prevalent when ECEC centres and basic schools (the integrated primary and lower secondary school level) are integrated on a single site.
- In many Northern European countries the transitions grades can be physically integrated. In **Latvia, Lithuania and Finland**, the last year or two preceding compulsory primary education can take place in either ECEC centres or in primary schools (European Commission et al., 2014). In **Sweden**, the last year of ECEC before compulsory school is a pre-primary class for six-year-olds (*förskoleklass*) which is located in primary schools (European Commission et al., 2014). As discussed in Chapter 5, some **Danish municipalities** organise collaborations between ECEC centres and local primary schools within the same catchment area.
- In **Wales (United Kingdom)**, the government is using the school building and refurbishment programme to ensure that local authorities improve collaboration between primary schools and ECEC providers by hosting ECEC and school services on the same site. Currently, there are a number of approaches to collaboration. These range from separate nursery schools to integrated children centres where everything from maternity services to ECEC are co-located within the local primary school (Welsh Government, 2017).
- In **Italy**, the reorganisation of state schools in comprehensive institutes covering children from 3 to 14 helps to apply continuity in the curriculum and common leadership.

What policy development pointers arise from this research?

This final section outlines some policy pointers emerging from countries' experiences and struggles in ensuring professional continuity. They are exploratory and seek to provide a source of inspiration as to what is important to take into account when designing and revising policies and practices to foster professional continuity. They should not be viewed as prescriptive.

Match demands on staff with resources

While guidelines for the transition process are almost commonplace and reflect growing policy attention on transitions, additional resources, staff and time to help practitioners meet expectations for transitions do not seem to be widely available. If transitions practices and cross-institutional co-operation are to be seen as success stories rather than as additional administrative requirements, staff need to be able to take on their transition-related roles during their regular working time and with specialist support where needed. The use of special counsellors, such as in Slovenia, and several countries' success in bringing pre-primary and primary teachers' time allocations into line, may provide sources of inspiration to other countries (OECD, 2016a; Ministry of Education, Science and Sport of the Republic of Slovenia, 2017).

Embrace and support the role of leaders in ECEC and primary schools

Leadership is an issue cutting across the various challenges and strategies highlighted above. In most countries the responsibility for managing successful transitions is mainly in the hands of individual centre leaders and school principals, who act as role models for staff. Some of them may even be seen "as visionaries and motivators for a joint concept on transition" (Charlotte Bühler Institut, 2016c). In many countries, these individuals have overall responsibility for the professional development of their teachers and staff. It is crucial that they have the means to understand staff needs and enable them to take part in on-site and off-site training programmes when additional development is needed. They can also make the strategic choice to bring in additional support or specialist staff when needed. This can be illustrated with two examples:

- **Norway's Framework Plan** stipulates that the head teacher of the kindergarten and the pedagogical leader have a particular responsibility for the planning, implementation, assessment and development of the kindergarten's tasks and content. They are also responsible for advising the rest of the staff, including on transitions. The national guide on transitions underlines that the head teachers in both kindergarten and primary school are responsible for ensuring co-operation between both institutions. It highlights that leaders at both levels are key for launching initiatives and providing support for development and change, identifying challenges and helping to develop coping measures to ensure good transitions for school starters (Gjerustad et al., 2016; Norwegian Directorate for Education and Training, 2017).
- **Austria** specifies that management in ECEC and primary schools is responsible for fostering exchange between management and staff in the different institutions, co-ordinating joint projects, making time available to facilitate transitions, arranging training courses across institutions, and providing material resources or professional literature. Yet, there is no uniform definition of this role and functions may be performed in different ways and to a different degree across settings (Charlotte Bühler Institut, 2016c).

For all of these tasks, leaders not only need to be highly skilled, but they also need a clear legal environment for their work – such as for the sharing of information on children, as in Wales (United Kingdom) and Austria. They also need support to exercise their role effectively, for instance with the help of counsellors, as in Slovenia. This is especially true as there is usually no national transition policy on which to draw.

Ensure that early childhood education and care staff and primary school teachers learn together and from each other

Unequal status and differing perspectives between ECEC and primary are seen as key issues in many countries. Ensuring overlapping or joint pre-service and in-service training can help to bridge the gap and foster common understandings and shared approaches (Neuss et al., 2014). Measures to level the playing field can be a key ingredient in improved collaboration. Box 3.11 draws on lessons learnt in Italy that reflect on these challenges.

While aligning qualification levels may require a longer planning period, rolling out joint in-service training and workshops for both levels can be an important and less challenging first step. In doing so, it is pivotal to avoid any hierarchy between the two groups. It is also important to allow both sides sufficient time for preparation and participation. The approaches taken in pre-primary education can be as informative for the beginning of primary school as the other way around, ensuring that children are being picked up where they stand rather than where they are expected to stand.

Box 3.11 Case study: Insights from Italy's challenges and strategies around professional continuity

Institutional continuity emerges from Italian national curricular guidelines, which state that preschools prepare children for school by facilitating a smooth transition to primary education and by equipping children with the competencies expected at age six (MIUR, 2012a).

Research on continuity and transition informs preschool and schools' practices (Corsaro and Molinari, 2008; Coggi and Ricchiardi, 2014; Commodari, 2013; Pontecorvo, 1989; Pontecorvo, Tassinari and Camaiioni, 1990; Zanetti and Cavioni, 2014). Yet initiatives geared towards fostering continuity are largely localised and short term. In practice, continuity is left to the initiative of individual schools and teachers – conceived in a bureaucratic manner more than as a didactic question (MIUR, 2012b). While national research on continuity practices in Italy is scarce, a qualitative exploration carried out in 2014 by INVALSI (*Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione*), the Italian National Institute for the Evaluation of the System of Education and Training, suggests that school leaders and teachers, especially those in ECEC, face several challenges in adopting a more professional way of teaching, observing, assessing and reporting from a continuity perspective (Stringher, 2017). Such challenges have also been experienced by coordinators in Rome municipality.

The first challenge is the general lack of professional development for teachers on transition or continuity. Transition does not seem to be a priority for school leaders. Closer university-school collaboration could be fostered to assess children's needs during this transition; to facilitate an open dialogue and joint in-service training involving preschool and primary school teachers and leaders (Maffeo and Casali, 2013); and also to implement professional development on continuity for head teachers. In addition, if the objective is to avoid the fade-out effect of teachers' training, follow-up actions need to be periodically planned that are attuned to children's and teachers' needs.

The second challenge is preschool and primary school teachers' false beliefs and reciprocal distrust. Transformative teacher training is needed to overcome these. This could help bridge historical pedagogical differences apparently rooted in the different origins of preschool and primary education. For instance, preschool teachers underline the difference with primary school: "in primary education there is no play dimension, while in preschool all is learnt through play, in primary this disappears completely" (Stringher, 2017, p. 21). As a result, preschool teachers often train children to quietly sit still, calling this practice "schoolification".

Source: Case study provided by Cristina Stringher (INVALSI), edited by the OECD Secretariat.

For instance, the ability of primary school teachers to enhance quality and encourage child-friendly environments within the classroom matters, as does their wider understanding of child development, enabling them to cater for the needs of individual children (Akhter et al., 2012). As discussed, above, some examples of joint training exist in countries like Austria, Germany and

Japan. In the local authority of Ceredigion in Wales (United Kingdom), for instance, a day nursery with a focus on transitions for children with additional learning needs welcomes visits from other settings and schools. It also discusses their initiatives with the local advisory teacher, sharing good practices across the county (Welsh Government, 2017). Teachers at both levels also need to receive clear guidance on what information they can and should share as a child moves on, and the role parents need to play.

Strengthen the evidence base for transition-related training and guidance

As indicated in the literature review, the research carried out on the effectiveness of transition-related pre-service training and professional development so far is as encouraging as it is scarce. More research is needed on the most successful types and modes of delivery. While local examples of successful training seem to be on the rise, this diversity of approaches seems to be insufficiently exploited for evaluation purposes, to identify what works best, for whom and under what conditions. Such evaluations could help ensure that successful training programmes can be adapted and scaled up – at least within the context of a national or regional ECEC and primary school system. This is particularly important given the overall scarcity of research on transitions.

The question to what extent transition guidelines and transition-related statements in curricula translate into effective transition practices also remains largely unanswered. There is a lack of accountability in this regard. The provision of effective materials could be a relatively affordable way to improve transitions but is not a substitute for expanding relevant pre-service and in-service training. This discussion is even more salient as many OECD member and non-member economies are experiencing a rise in the population of immigrant children who may require additional support and attention at the onset of their educational career, putting even greater responsibility on ECEC and primary school practitioners (OECD, 2015). This point requires further attention.

Annex 3.A Detailed country-by-country responses

For **WEB** tables, see: <http://dx.doi.org/10.1787/9789264276253-en>

Table 3.A.1 Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015)

WEB	Table 3.A.2	Initial teacher education and entry into the profession, pre-primary and primary education in public institutions (2013)
WEB	Table 3.A.3	Percentage of teachers in primary and pre-primary education by age (2014)
WEB	Table 3.A.4	Content of pre-service education of pre-primary and primary education teachers (2013)
WEB	Table 3.A.5	General and specific training and professional development of ECEC and primary education staff (2014)
WEB	Table 3.A.6	Support to staff and collaboration on transitions (2014)

Table 3.A.1 Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015)

Jurisdiction name	Children's age												
	0	1	2	3	4	5	6	7	8	9	10	11	12
Austria							6						
	"Kindergartenpädagoge/in (kindergarten teacher)"					Volksschullehrer/in (primary school teacher)							
	Helfer/in, Assistent/in (auxiliary/support staff)												
	Sonderpädagoge/in (pedagogues for special needs education)												
Belgium – Flemish Community	Sprachlehrer/innen (language teachers)					6							
	Kleuteronderwijzer(es) (pre-primary teacher)					Onderwijzer(es) (teacher)							
						*							
Canada*						Early Childhood Educators					Primary/Elementary Teachers (Up to 17)		
	Educador de Párvulos (Early Childhood Educator)					Licenciado en Pedagogía en Educación Básica (Primary school teacher)					(Up to 13)		
Chile	Técnico en Educación Parvularia (Early childhood teacher assistant)					6							
Colombia						6							
						Maestros/maestras (teachers)					(Up to 17)		
						Coordinadores/as (coordinators)					(Up to 17)		
	Equipo Psicosocial (Psychosocial staff)					Orientador escolar (School orientation staff)					(Up to 17)		
	Nutricionista (Nutritionist)												
Croatia*	Docente de apoyo (Auxiliary staff)												
	Agentes educativo (Educational agent)												
						6							
Czech Republic													
	Odgojitelj (Educator of preschool children)												
						Učitelj (Educators and teachers)							
	Stručni tim dječjeg vrtića (Professional team for preschool)					Stručni tim osnovne škole (Professional team for primary school)							
	Stručni tim dječjeg vrtića (Professional team for preschool)					Stručni tim osnovne škole (Professional team for primary school)							
						6							
	Učitel matečké školy (pre-primary school teacher)					Učitel prvního stupně základní školy (teacher of primary school)							

Table 3.A.1 Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015) (continued)

Jurisdiction name	Children's age																	
	0	1	2	3	4	5	6	7	8	9	10	11	12					
Denmark*							7											
								Grundskole lærer (Primary school teacher) (Up to 17)										
							Pædagog (pedagogue)	(Up to 17)										
							Børnehaveklasseleder (kindergarten class leader)											
							Pædagogisk assistent (pedagogical assistant)*	(Up to 17)										
							“Pædagogisk støttepersonale tildelt individuelle børn, fx støttepædagog, sprogpædagog, inklusionspædagog, tale-hørepædagog (Pedagogical support staff allocated individual children, e.g. special needs pedagogue, language teacher, inclusion teacher, speech and language teacher)”	(Up to 17)										
							Pædagogmedhjælper (assistant without training)*	(Up to 17)										
Finland							7											
							lastentarhanopettaja (Kindergarten teacher)	luokanopettaja (Class school teacher)										
							Suomi/Ruotsi Toisena Kielenä -Opettaja (Special Speech Teachers)											
							Erityislästentarhanopettaja (Special Kinderkarten Teachers)											
							Avustaja (Assistants)											
							lastenhoitaja (Vocational nurse)											
Germany							*											
							Erzieher/in (educator)	(Up to 13)										
							Kinderpfleger/innen & Sozialassistenten/innen (childcarers)	(Up to 13)										
							Sozialpädagogen/innen (social pedagogues)	(Up to 13)										
							Fachkräfte zur Förderung von Kindern mit (drohender) Behinderung (Staff working with children with or at risk of disabilities)	(Up to 13)										
							Kindheitspädagogen/innen (ECEC pedagogues)	(Up to 13)										
							Zweit- und Ergänzungskräfte (Assistants)	(Up to 13)										
								Grundschullehrer/in (primary school teacher) (Up to 13)										
Greece							6											
							Nηπιαγός/ Nipiagogos (pre-primary school teacher)	Δάσκαλος/ Dáskalos (primary school teacher)										

Table 3.A.1 Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015) (continued)

Jurisdiction name	Children's age												
	0	1	2	3	4	5	6	7	8	9	10	11	12
Hungary							6						
	Óvodapedagógus (kindergarten educator, pre-school teacher)												
	Dajka (care assistant)												
	Pedagógiai asszisztens (Pedagogical assistant); Gyógypedagógiai asszisztens (Special educational needs assistant)												
Ireland							Tanító (primary school teacher)						
							Pedagógiai asszisztens (Pedagogical assistant); Gyógypedagógiai asszisztens (Special educational needs assistant)						
Italy*							6						
	Childcare Practitioner												
	Preschool Room Leader						Primary School Teacher						
Japan							6						
	保育教諭 (Teacher for early childhood education and care)							小学校教諭 (Elementary school teacher)					
	保育士 (Day-care staff)												
Kazakhstan							6						
	Воспитатель (Pre-primary teacher)												
	Тәрбиешінің көмекшісі / Помощник воспитателя (Assistant)												
	Қазақ тілі оқытушысы / Преподаватель казахского языка (Teacher of Kazakh language); Хореограф (Choreographer); Жүзуден нұсқаулы / Инструктор по плаванию (Swimming instructor); Дене тәрбиесі жөніндегі нұсқаулы / Инструктор по физкультуре (Gym instructor); Бейнелеу енері жөніндегі оқытушы / Преподаватель по изобразительному искусству (Drawing teacher)												
	Музыка жетекшісі / Музыкальный руководитель (Music teacher)							Учитель начального образования (Primary education teachers)					

Table 3.A.1 Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015) (continued)

Jurisdiction name	Children's age												
	0	1	2	3	4	5	6	7	8	9	10	11	12
Luxembourg						6							
				Instituteur de l'enseignement fondamental (Primary school teachers teach pre- and primary school level)									
					Équipe multi-professionnelle (Multi-professional team)								
Mexico						6							
				Maestra de Educación Preescolar (Preschool teacher in general preschool/ indigenous/ migrant education)									
				Instructor comunitario de Preescolar (Community preschool instructor)	-			Maestra de Educación Primaria (Primary education teacher)					
								Instructor comunitario de Primaria (Community primary school instructor)					
Netherlands						6							
			Pedagogische medewerker (pedagogical staff)				Docent primair onderwijs (primary school teacher)						
New Zealand			ECE teacher			6							
								Primary school teacher					
Norway						6							
			Barnehagelærer (Kindergarten teacher, formerly called preschool teacher (førskolelærer))				Grunnskolelærer (Teacher)						
					Barne- og ungdomsarbeider (Child and youth care workers with vocational education and training)							(Up to 18)	
							Assisterer (Assistant – auxiliary staff)						(Up to 18)
							Støttepedagoger for ett eller flere barn (Support pedagogues for one or several children)						(Up to 18)
Poland							7						
								Nauczyciel wychowania przedszkolnego (pre-primary teacher)					
								Nauczyciel nauczania wczesnoszkolnego (primary school teacher for integrated education in grades 1-3)					
Portugal							6						
								Educador de infância (preschool teacher)	Professor do 1.º ciclo do ensino básico (early primary school teacher)				
Slovak Republic							6						
								Učiteľ' materskej školy (Pre-primary school teacher)	Učiteľ' prvého stupňa základnej školy (Primary school teacher)				
									Asistent učitel'a (Teacher assistant)				
									Špeciálny pedagóg (Special pedagogist)				
									Školský logopéd (Speech disorder specialist)				

Table 3.A.1 **Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015)** (continued)

Jurisdiction name	Children's age													
	0	1	2	3	4	5	6	7	8	9	10	11	12	
Slovenia*						6								
	Vzgojitelj predšolskih otrok (preschool teacher)													
	Pomočnik vzgojitelja (preschool teacher assistant)					Učitelj razrednega pouka (primary education teacher)								
		Vzgojitelj za dodatno strokovno pomoč (Preschool teacher for additional professional assistance)											(Up to 17)	
		Učitelj za dodatno strokovno pomoč (Teacher for additional professional assistance)											(Up tp 17)	
		Svetovalni delavec (kindergarten/school counsellor)											(Up to 17)	
Spain					6									
	Maestro de Educación Infantil (Pre-primary school teacher)													
	Docentes de apoyo (Auxiliary staff)					Maestro de Educación Primaria (Primary school teacher)								
						Maestros para alumnos de necesidades educativas especiales (staff for individual children -special needs children)								
						“Profesor Técnico de Servicios a la Comunidad” (teacher offering Social services to the community)								
						“Orientador escolar” (School orientation staff)								
Sweden*					7									
	Förskollärare (preschool teacher)					Grundskollärare (primary school teacher)							(Up to 15)	
	Barnskötare (child minder)					Fritidspedagog (leisure-time pedagogue)								
	Pedagogisk resurspersonal för individuella barn t.ex. resurspedagog, specialpedagog, tal- och språkpedagog, psykolog (Pedagogical support staff allocated individual children, e.g. special needs pedagogue, speech and language teacher, psychologist);													
	could also be specialists working with a group of children or as advisors with guidance for the staff.													
						Pedagogisk resurspersonal för individuella elever t.ex. resurspedagog, specialpedagog, speciallärares, kurator, tal- och språkpedagog, psykolog (Pedagogical support staff allocated individual children, e.g. special needs pedagogue, special needs teacher, social counsellor (psychosocial), speech and language teacher, psychologist)								(Up to 15)
						Stödpersonal/elevassistent (assistant with or without training)							(Up to 15)	

Table 3.A.1 Types of staff in ECEC and primary schooling during the time of transitions by children's ages (2015) (continued)

Jurisdiction name	Children's age												
	0	1	2	3	4	5	6	7	8	9	10	11	12
Switzerland						6							
	Kindererzieher / éducateur de l'enfance / educatore dell'infanzia (ECEC pedagogue); = qualified staff with overall responsibility		Diplomierte/r Lehrer/in für die Vorschulstufe / enseignant/e diplômé/e du degré primaire / docente diplomato/a per il livello elementare (Teacher for primary school level)										
	Fachperson Betreuung / assistant socio-éducatif / operatore socioassistenziale (ECEC specialist) (qualified staff with pedagogical responsibility)		Diplomierte/r Lehrer/in für die Vorschul- und Primarstufe / Enseignant/e diplômé/e des degrés préscolaire et primaire / docente diplomato/a per il livello prescolastico ed elementare (Teacher for preschool and primary school level)										
	Pädagogische Assistenz / assistant pédagogique / assistente all'infanzia (ECEC assistant); (Assistants)												
	Sonderpädagoge Früherziehung / pédagogue éducation précoce / docente educazione precoce (ECEC special needs pedagogue); (support staff for individual children)												
	Staff for individual children, e.g. Sonderpädagoge, Logopäde, Psychomotoriktherapeut / pédagogue spécialisé, logopédiste, thérapeute en psychomotricité / docente pedagogia specializzata, logopedista, psicomotricista (special needs pedagogue, speech therapist, psychomotor therapist) (support staff for individual children)		6										(Up to 14)
Turkey		Okul Öncesi Öğretmeni (Pre-primary school teacher, preschool teacher, nursery class teacher)		6			Primary school teacher						
United Kingdom - Wales	Early years/ childcare practitioners		5			Primary school teacher							
						Learning support staff for children with special education needs							(Up to 17)
						Learning Support staff within schools							(Up to 17)

Notes:

This table provides an indicative, but not exhaustive overview of practitioners who are working with children in the year before or after a transition from one level to the other. Please refer to the web version for additional notes.

* In Canada and Germany, the starting age of compulsory education varies greatly across jurisdictions.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

Notes

1. Austria, Denmark, Finland, Japan, Norway, Slovenia, Sweden and Wales (United Kingdom).
2. Canada and Germany and sometimes Austria provided information disaggregated by provinces or Länders. Hence, there can be close to 60 jurisdictions for some indicators.
3. Teachers' effectiveness in developing children's socio-emotional competences (Slot et al., 2015).
4. Among the measures of process quality used by Burchinal et al. (2002) were the Early Childhood Environmental Rating Scale (ECERS; Harms and Clifford, 1980), the Infant-Toddler Environment Rating Scale (ITERS; Harms, Cryer and Clifford, 1990), and the Caregiver Interaction Scale (CIS; Arnett, 1989).
5. Quality in the provision of care was measured by Siraj-Blatchford et al. (2003) using the Early Childhood Environment Rating Scales (ECERS-E and ECERS-R), an observational assessment of pedagogy, facilities and programmes, and centre managers' education.
6. Meaning their loss from the profession.
7. Centre quality was measured by Sylva et al (2006) using the revised version of the Early Childhood Environment Rating Scale (Harms, Clifford, and Cryer, 1998) and the English curriculum extension to it (Sylva, Siraj-Blatchford and Taggart, 2003).
8. Austria, Denmark, Finland, Japan, Kazakhstan, Norway, Slovenia, Sweden and Wales (United Kingdom).
9. As assistants and other staff categories are also involved, especially in pre-primary education (Table 3.A1), the salary statistics presented on teachers underestimate the differences between the workforces as they only concern the typically more qualified members of the pre-primary workforce.
10. Scotland (United Kingdom), Finland, Denmark, Iceland, Norway, the Czech Republic, Hungary, the Slovak Republic, Spain and the United States.
11. Australia is an anomaly: it has a low child-teacher ratio in pre-primary (5:1), but the highest relative salary costs at pre-primary level – more than 25%.
12. This refers to teachers only, not all staff. Please refer to Chapter 4 for a discussion on staff-child ratios.
13. Please refer to the source tables from OECD (2014b) for details on individual country responses: <http://dx.doi.org/10.1787/888933120252>.
14. This is also documented in the literature (see e.g. Neuss et al., 2014; OECD, 2016a).

References

- Ahtola, A., et al. (2012), "Successful handling of entrance to formal schooling: Transition practices as a local innovation", *International Journal of Transitions in Childhood*, Vol. 5/1, pp. 3-21.
- Akhter, M., et al. (2012), "Transition - From Home to ECCE Program, from ECCE Program/Home to Primary School – A Desk Review of Asia-Pacific Regional Network for Early Childhood", www.ar nec.net/wp-content/uploads/2014/03/Final-report-on-Transition-.21.10.pdf.
- Anderson, L. W. (2000), "Why should reduced class size lead to increased student achievement?", in M. C. Wang, and J. D. Finn (eds.), *How Small Classes Help Teachers Do Their Best*, pp. 3-24, Philadelphia: Temple University Center for Research in Human Development.
- Angrist, J. D., and V. Lavy (1998), "Does teacher training affect pupil learning? Evidence from matched comparisons in Jerusalem public schools", *NBER Working Paper*, No. w6781, National Bureau of Economic Research, Cambridge, MA.
- Arnold, C., et al. (2006), "Is everybody ready? Readiness, transition and continuity: Lessons, reflections and moving forward", paper commissioned for the EFA Global Monitoring Report 2007, Strong Foundations: Early Childhood Care and Education, <http://unesdoc.unesco.org/images/0014/001474/147441e.pdf>.
- Assel, M. A., et al. (2007), "An evaluation of curriculum, setting, and mentoring of children enrolled in pre-kindergarten", *Reading and Writing*, Vol. 20/5, pp. 463-494.
- Atkinson, M., et al. (2002), *Multi-Agency Working: A Detailed Study*, National Foundation for Educational Research, Slough.
- Aubrey, C., R. Godfrey, and A. Harris (2013), "How do they manage? An investigation of early childhood leadership", *Educational Management Administration and Leadership*, Vol. 41/1, pp. 5-29.
- Australian Government Department of Education, Employment and Workplace Relations (2009), "Belonging, being and becoming: The early years learning framework for Australia", Produced for the Council of Australian Governments.
- BAKIP (2014), Lehrplan für die Bildungsanstalten für Kindergartenpädagogik (draft) [Curriculum for 'Colleges for the training of nursery school teachers' - draft], bakipmistelbach.ac.at/images/pdf/lehrer/Lehrplan%20NEU%20SV_BAKIP_Entwurf_April2014.pdf.
- Ballou, D., and M. Podgursky (1993), Teachers' attitudes toward merit pay: Examining conventional wisdom, *Industrial and Labor Relations Review*, Vol. 47/1, pp. 50-61.
- Ballou, D., and M. Podgursky (2000), Reforming teacher preparation and licensing: What is the evidence?, *Teachers College Record*, Vol 102/1, pp 5-27.
- Baugh, W. H., and J. A. Stone (1982), "Mobility and wage equilibration in the educator labor market", *Economics of Education Review*, Vol. 2/3, pp. 253-274.
- Betts, J.R., K.S. Rueben, and A. Danenberg (2000), "Equal resources, equal outcomes? The distribution of school resources and student achievement in California", Public Policy Institute of California, San Francisco, www.ppic.org/content/pubs/report/R_200JBR.pdf.
- Blatchford, P. et al. (2012), *The DISS Project: Background, Aims and Methodology*, Institute of Education, University of London.
- Blatchford, P., P. Bassett, and P. Brown (2011), Examining the effect of class size on classroom engagement and teacher-pupil interaction: Differences in relation to pupil prior attainment and primary vs. secondary schools, *Learning and Instruction*, Vol 21/6, pp. 715-730.

- Blatchford, P., et al. (2003), "Are class size differences related to pupils' educational progress and classroom processes? Findings from the Institute of Education class size study of children aged 5-7 years", *British Educational Research Journal*, Vol. 29/5, pp. 709-730, <http://dx.doi.org/10.1080/0141192032000133668>.
- Blatchford, P., et al. (2002), "Relationships between class size and teaching: a multi-method analysis of English infant schools", *American Educational Research Journal*, Vol. 39/1, pp. 101-132.
- Bloom, P. J. and M. Sheerer (1992), "The effect of leadership training on child care program quality", *Early Childhood Research Quarterly*, Vol. 7/4, pp. 579-94.
- Bloom, P. J., and J. Bella (2005), "Investment in leadership training-the payoff for early childhood education", *Young Children*, Vol. 60/1, p. 32.
- BMBF (2016), "Entwurf Lehrplan der Bildungsanstalt für Kindergartenpädagogik" [Draft Curriculum of the colleges for the training of nursery school teachers], In force since 1 September 2016. Bundesministerium für Bildung, Vienna.
- BMBF (2014), "Rahmencurriculum für die Lehrgänge „Frühe sprachliche Förderung“" [Framework Curriculum of courses for 'Early language learning support]. Bundesministerium für Bildung, Vienna.
- Bohan-Baker, M. and P. Little (2002), *The Transition to Kindergarten: A Review of Current Research and Promising Practices to Involve Families*, Harvard Family Research Project, Cambridge, Massachusetts, www.hfrp.org/content/download/1165/48670/file/bohan.pdf.
- Borman, G. D., and N. M. Dowling (2008), "Teacher attrition and retention: A meta-analytic and narrative review of the research", *Review of Educational Research*, Vol. 78/3, pp. 367-409.
- Bouguen, A. (2016), "Adjusting content to individual student needs: Further evidence from an in-service teacher training program", *Economics of Education Review*, Vol. 50, pp. 90-112.
- Branch, G. F., E. A. Hanushek, and S. G. Rivkin (2008), Principal turnover and effectiveness. Unpublished manuscript.
- Branch, G., E. Hanushek, and S. Rivkin, (2009), "Estimating principal effectiveness", CALDER Working Papers, No. 32. National Center for Analysis of Longitudinal Data in Education Research.
- Bressoux, P., F. Kramarz and C. Prost (2009), "Teachers' training, class size and students' outcomes: Learning from administrative forecasting mistakes", *The Economic Journal*, Vol. 119/536, pp. 540-561.
- Britto, P.R. and M.C. Limlingan (2012), *School Readiness and Transitions, A companion to the Child Friendly Schools Manual*, UNICEF, New York.
- Bruhwiler, C., and P. Blatchford (2011), "Effects of class size and adaptive teaching competency on classroom processes and academic outcome", *Learning and Instruction*, Vol. 21, pp. 95-108.
- Burchinal, M. R., et al. (2002), "Caregiver training and classroom quality in child care centers", *Applied Developmental Science*, Vol. 6/1, pp. 2-11.
- Burchinal, M., et al. (2008), "Predicting child outcomes at the end of kindergarten from the quality of prekindergarten teacher-child interactions and instruction", *Applied Developmental Science*, Vol. 12/3, pp. 140-153.
- CCL (Canadian Council on Learning) (2006), *Why is High-Quality Child Care Essential? The link between Quality Child Care and Early Learning*, Lessons in Learning, Canadian Council on Learning, Ottawa.

Charlotte Bühler Institut (2016a), "Individualisierung und differenzierte Förderung in der Schuleingangsphase" [Individualisation and differentiated support in the school entrance phase]. BMB, Vienna, www.charlotte-buehler-institut.at/wp-content/uploads/2016/12/Individualisierung-BMB-final-2016-.pdf.

Charlotte Bühler Institut (2016b), "Leitfaden zur sprachlichen Förderung am Übergang vom Kindergarten in die Grundschule" [Guideline for language support at the transition from kindergarten to elementary school], BMB, Vienna. www.bmb.gv.at/schulen/bw/abs/Broschu_re_sprachl_Fo_rderung_A4_BF.pdf?5s8z0m.

Charlotte Bühler Institut (2016c), *Austria Country Background Report on Transitions*, Charlotte Bühler Institut, Vienna, www.oecd.org/edu/school/SS5-country-background-report-austria.pdf.

Charlotte Bühler Institut (2016d). Schülerinnen/Schülereinschreibung NEU [NEW enrolment of pupils], BMB, Vienna, www.charlotte-buehler-institut.at/wp-content/uploads/2016/10/Sch%C3%BClerInneneinschreibung-BMB-final-2016.pdf.

Clark, D., P. Martorell, and J. Rockoff (2009). "School principals and qchool performance", CALDER Working Papers, No. 38. National Center for Analysis of Longitudinal Data in Education Research.

Clarke-Stewart, K. A., et al; (2002), "Do regulable features of child-care homes affect children's development?", *Early Childhood Research Quarterly*, Vol. 17, pp. 52-86.

Clotfelter, C. T., H. F. Ladd and J. L. Vigdor (2006), "Teacher-student matching and the assessment of teacher effectiveness", *Journal of human Resources*, Vol. 41/4, pp. 778-820.

Coggi, C. and P. Ricchiardi (2014), "La «school readiness» e la sua misura: uno strumento di rilevazione per la scuola dell'infanzia" ["School readiness" and its measurement: an assessment tool for preschools]. ECPS Journal, Vol. 9/2014, pp. 283-309.

Commodari, E. (2013), "Preschool teacher attachment, school readiness and risk of learning difficulties", *Early Childhood Research Quarterly*, Vol. 28/1, pp. 123-133, <http://dx.doi.org/10.1016/j.ecresq.2012.03.004>.

Corsaro, W and L. Molinari (2008), "Policy and practice in Italian children's transition from preschool to elementary school, *Research in Comparative and International Education*, Vol. 3/3, pp. 250-265.

Croninger, R. G., et al. (2007), "Teacher qualifications and early learning: Effects of certification, degree, and experience on first-grade student achievement", *Economics of Education Review*, Vol. 26/3, pp. 312-324.

Dalli, C. (2014), Quality for Babies and Toddlers in Early Years Settings, TACTYC Occasional Papers, No. 4, <http://tactyc.org.uk/wp-content/uploads/2014/04/Occ-Paper-4-Prof-Carmen-Dalli.pdf>.

Danish Ministry for Children and Social Affairs (2016), *Denmark Country Background Report on Transitions*, Ministry for Children and Social Affairs, Copenhagen, www.oecd.org/edu/school/SS5-country-background-report-denmark.pdf.

Darling-Hammond, L. (2000), "Teacher quality and student achievement: A review of state policy evidence", *Journal of Education Policy Analysis*, Vol. 8/1.

Darling-Hammond, L., et al. (2005). "Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness", *Education Policy Analysis Archives*, Vol. 13/42.

Day and Russel (2010). "Transitions in Early Childhood. The case for a Consistent, competent and stable workforce", in Kagan, S. L., and Tarrant, K. (2010), *Transitions for Young Children: Creating Connections across Early Childhood Systems*, Brookes Publishing Company, Baltimore.

- De Haan, A., et al. (2013). "Targeted versus mixed preschool and kindergartners: Effects of classroom composition and teacher managed activities on disadvantaged children's emergent academic skills", *School Effectiveness and School Improvement*, Vol. 24, pp. 177-194.
- De Schipper, E. J., M. J. Riksen-Walraven and S. A. Geurts (2007). "Multiple determinants of caregiver behavior in child care centers", *Early Childhood Research Quarterly*, Vol. 22, pp. 312-326.
- Desimone, L., et al. (2004), "Comprehensive School Reform: An Implementation Study Of Preschool Programs In Elementary Schools", *The Elementary School Journal*, Vol. 104/5, pp. 387-407.
- Dhuey, E., and J. Smith (2014), "How Effective are School Principals in the Production of Student Achievement?", *Canadian Journal of Economics/Revue canadienne d'économique*, Vol. 47/2, pp. 634-663.
- Dunn, L.S. (1984). *Peabody Picture Vocabulary Test (revised)*, Circle Pines, MN: American Guidance Service.
- Early, D. M., et al. (2007), "Teachers' education, classroom quality, and young children's academic skills: Results from seven studies of preschool programs", *Child development*, Vol. 78/2, pp. 558-580.
- Early, D. M., et al. (2001), "Transition practices: Findings from a national survey of kindergarten teachers", *Early Childhood Education Journal*, Vol. 28/3, pp. 199-206.
- ECE Taskforce Secretariat (2010), 1: *Overview of the New Zealand Early Childhood Education (ECE) System: Introductory Briefing*, ECE Taskforce.
- EEF (2014), "Catch Up Numeracy. A one to one numeracy intervention delivered by teaching assistants", Education and Endowment Foundation, London.
- Ehrenberg, R. G., D. D. Goldhaber and D. J. Brewer, (1995), Do teachers' race, gender, and ethnicity matter? Evidence from the National Educational Longitudinal Study of 1988, *Industrial and Labor Relations Review*, Vol. 48/3, pp. 547-561.
- Emfinger, K., 2012, "Literacy readiness: Transitional partnerships between preschool and kindergarten", *Childhood Education*, Vol. 88, pp. 258-265.
- Engel, A., S. Barnett, Y. Anders and M. Taguma (2015). "Early childhood education and care policy review. Norway", OECD, Paris, www.oecd.org/norway/Early-Childhood-Education-and-Care-Policy-Review-Norway.pdf.
- European Commission, EACEA, Eurydice and Eurostat (2014), *Key Data on Early Childhood Education and Care in Europe: 2014 Edition*, Eurydice and Eurostat Report, Publications Office of the European Union, Luxembourg.
- Evans, L. (2001), "Delving deeper into morale, job satisfaction, and motivation among education professionals", *Educational Management and Administration*, Vol. 29, pp. 291-306.
- Faour, B. (2010), *Early Childhood in the Arab Countries: Status and Challenges*, Early Childhood Care and Education Regional Reports, No. WCECCE/Ref.7, UNESCO, WCECCE.
- Faust, G., F. Wehner and J. Kratzmann (2013). "Kooperation von Kindergarten und Grundschule" [Co-operation of ECEC centres and primary schools], in Faust, G. (ed.). "Einschulung. Ergebnisse aus der Studie „Bildungsprozesse, Kompetenzentwicklung und Selektionsentscheidungen im Vorschul- Schulalter (BiKS)“" [Enrolment. Results from the study "Education Processes, Competence Development and Selection Decisions in Preschool Age (BiKS)"], pp. 137-152, Waxmann, Munster.
- Ferguson, R.F. (1991), "Paying for public education: New evidence on how and why money matters", *Harvard Journal on Legislation*, Vol. 28/2, pp. 465-498.

- Finn, J. D., and C. M. Achilles (1999), “Tennessee’s class size study: findings, implications, misconceptions”, *Educational Evaluation and Policy Analysis*, Vol. 21/2, pp. 97-109.
- Finnish Ministry of Education and Culture (2016), *Finland Country Background Report on Transitions from ECEC to Primary School*, Department for General Education and Early Childhood Education, Helsinki, www.oecd.org/edu/school/SS5-country-background-report-finland.pdf.
- Fives, H. (2003), “What is teacher efficacy and how does it relate to teachers’ knowledge? A theoretical review”, Paper presented at the American Educational Research Association Annual Conference, Chicago.
- Fontaine, N.S., et al. (2006). Increasing quality in early care and learning environments”, *Early Child Development and Care*, Vol. 176, pp. 157-169, <http://dx.doi.org/10.1080/0300443042000302690>.
- Fukkink, R.G., A. Lont (2007), “Does training matter? A meta-analysis and review of caregiver training studies”, *Early Childhood Research Quarterly*, Vol. 22, pp. 294-311.
- Gerber, S. B. et al. (2001). “Teacher aides and students’ academic achievement”, *Educational Evaluation and Policy Analysis*, Vol. 23/2, pp. 123-43.
- Gialamas, A., et al. (2014), “Child care quality and children’s cognitive and socio-emotional development: an Australian longitudinal study”, *Early Child Development and Care*, Vol. 184, pp. 977-997, <http://dx.doi.org/10.1080/03004430.2013.847835>.
- Gjerustad, C., R. A. Federici, and E. Hovdhaugen (2016), Spørsmål til Skole-Norge våren 2016. Resultater og analyser fra Utdanningsdirektoratets spørreundersøkelse blant skoler og skoleiere [Questions for schools in Norway – spring 2016. Results and analyses from the Norwegian Directorate for Education and Training’s survey among schools and school owners]. NIFU Report 2016: 6, cf. www.udir.no/tall-og-forskning/finn-forskning/rapporter/sporsmal-til-skole-norge-varen-2016/.
- Government of Japan (2016), *Japan Country Background Report on Transitions*, Government of Japan, Tokyo, www.oecd.org/edu/school/SS5-country-background-report-japan.pdf.
- Greller, M. M. (2006), “Hours invested in professional development during late career as a function of career motivation and satisfaction”, *Career Development International*, Vol. 6, pp. 544-559.
- Grey, A. (2004), “The quality journey: Is there a leader at the helm?”, *New Zealand Research in Early Childhood Education*, Vol. 7, pp. 91-102.
- Grillitsch, M., B. Fageth and U. Kowatz (2014), *Sprachförderung an der Schnittstelle Kindergarten – Volksschule. Erste Ergebnisse der Evaluation von Modellprojekten. Vortrag bei der Tagung „Grenzanalysen – Empirische Zugänge in der Erziehungswissenschaft“* [Language learning support at the transition between kindergarten and primary school: First results of the evaluation of model projects: Presentation at the conference ‘Grenzanalysen – Empirische Zugänge’ in der Erziehungswissenschaft’], University of Salzburg.
- Grillitsch, M. and E. Stanzel-Tischler (2016), “Formative Evaluation der Netzwerkprojekte – Ergebnisse aus Erhebungen im Jahr 2015” [Formative evaluation of the network projects – results from data collected in 2015], BIFIE, Salzburg.
- Hanke, P., J. Backhaus and A. Bogatz (2013), “Den Übergang gemeinsam gestalten: Kooperation und Bildungsdokumentation im Übergang von der Kindertageseinrichtung in die Grundschule” [Shaping the transition together: co-operation and educational documentation in the transition from the ECEC to primary school], Waxmann Verlag, Munster.

- Hanke, P., et al. (2016), "The transition to primary school as a challenge for parents. The importance of collaboration between early childhood centres and primary schools for helping parents meet the challenge", in Dockett, S., Griebel, W. and Perry, B. (eds.) (2016). *Families and transition to school*, Springer, Dordrecht.
- Hanushek, E. A., and S. G. Rivkin, (2006), "Teacher quality", *Handbook of the Economics of Education*, Vol. 2, pp. 1051-1078.
- Hanushek, E. A., J. F. Kain, and S. G. Rivkin (1998), "Does special education raise academic achievement for students with disabilities?", *NBER Working Papers*, No. 6690, National Bureau of Economic Research, Cambridge, MA.
- Harris, D. N., and T. R. Sass (2011), "Teacher training, teacher quality and student achievement", *Journal of public economics*, Vol. 95/7, pp. 798-812.
- Hawk, P.P., C.R. Coble, and M. Swanson (1985), "Certification: It does matter", *Journal of Teacher Education*, Vol. 36/3, pp. 13-15.
- Hayden, J. (1997) "Directors of early childhood services: Experience, preparedness and selection", *Australian Research in Early Childhood*, Vol. 1/1, pp. 49-67.
- Hirst, M., et al. (2011), *Transition to Primary School: A Review of the Literature*, Commonwealth of Australia, Canberra.
- Honig, A.S., A. Hirallal (1998), "Which counts more for excellence in childcare staff – Years in service, education level or ECE coursework?", *Early Child Development and Care*, Vol. 145, pp. 31-46.
- Howes, C., M. Whitebook, D. Phillips (1992), "Teacher characteristics and effective teaching in child care: Findings from the National Child Care Staffing Study", *Child and Youth Care Forum*, Vol. 21/6, pp. 399-414, Kluwer Academic Publishers-Human Sciences Press.
- Huntsman, L. (2008), *Determinants of Quality in Child Care: A Review of the Research Evidence*, Centre for Parenting and Research, NSW Department of Community Services.
- ILO (International Labour Office) (2013), "ILO policy guidelines on the promotion of decent work for early childhood education personnel", Meeting of Experts on Policy Guidelines on the Promotion of Decent Work for Early Childhood Education Personnel, Geneva, 12-15 November 2013, International Labour Office, Sectoral Activities Department, Geneva.
- Imazeki, J. (2005), "Teacher salaries and teacher attrition", *Economics of Education Review*, Vol. 24/4, pp. 431-449.
- Ingersoll, R. (2001), "Teacher turnover and teacher shortage", *American Educational Research Journal*, Vol. 38, pp. 499-534.
- Ingersoll, R. (2012), "Beginning teacher induction: What the data tell us", *Phi Delta Kappan*, Vol. 93/8, pp. 47-51, <https://doi.org/10.1177/003172171209300811>.
- INVALSI (2016a), *Consultazione Nazionale RAV Infanzia 2016. Prime analisi sul questionario di consultazione*. [National Consultation on the Preschool Self-Evaluation Report Format 2016. Initial analyses on the consultation questionnaires] Rome.
- INVALSI (2016b), *Analisi descrittive degli indicatori RAV dal Questionario scuola - Grafici e Tabelle 1° ciclo di istruzione Anno Scolastico 2014/15* [Descriptive statistics of the School Questionnaire's Self-Evaluation Report Format for Schools – Graphs and Tables on the first cycle of education – School Year 2014/15]. Rome.

- INTO (Irish National Teachers' Organisation) (2008), *Transitions in the Primary School* (INTO Consultative Conference on Education), Irish National Teachers' Organisation, Dublin, Ireland, www.into.ie/ROI/Publications/TransitionsPrimarySchool.pdf.
- JSC IAC (Joint Stock Company Information-Analytic Center) (2017), *Kazakhstan Country Background Report on Transitions from ECEC to Primary School*, JSC "Information-Analytic Center", Astana, www.oecd.org/edu/school/SS5-country-background-report-kazakhstan.pdf.
- Kaga, Y., J. Bennett and P. Moss (2010), *Caring and Learning Together: A Cross-National Study on the Integration of Early Childhood Care and Education within Education*, UNESCO, Paris, <http://unesdoc.unesco.org/images/0018/001878/187818E.pdf>.
- Kagan, S. L., and K. Tarrant (2010), *Transitions for Young Children: Creating Connections across Early Childhood Systems*, Brookes Publishing Company, Baltimore.
- Kagan, S.L., K. Kauerz, K. Tarrant (2008), *The Early Care and EducationTeaching Workforce at the Fulcrum: An Agenda for Reform*, Teachers College Press, New York.
- Kalicki, B. (2007), "Übergang als Chance" [Transition as chance], *Theorie und Praxis der Sozialpädagogik*, Vol. 3, pp. 42-43.
- Kane, M. and N. Hayes (2010), *Supporting Early Childhood Educational Provision within a Cluster of Deis Preschool and Primary School Settings with a Specific Focus on Transition between the Two Educational Settings*, Centre for Social and Educational Research Dublin Institute of Technology, Dublin.
- Kane, T. J., J. E. Rockoff, and D. O. Staiger, (2008), "What does certification tell us about teacher effectiveness? Evidence from New York City", *Economics of Education Review*, Vol 27/6, pp. 615-631.
- Katz, L. (1983). "The professional preschool teacher", presented at the Annual Meeting of the National Association for the Education of Young Children (NAEYC), 3-6 November 1984, ERIC Clearinghouse on Elementary and Early Childhood Education, Atlanta, GA, p. 24.
- Kids Matter (2016). Starting School, Kids Matter: Australian Primary Schools Mental Health Institute, www.kidsmatter.edu.au/primary/resources-your-journey/starting-school (accessed 2 August 2016).
- Klassen, R.M. and M.M. Chiu (2010), "Effect on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress", *Journal of Educational Psychology*, Vol. 102/3, pp. 741-756.
- Kontos, S. and R. Fine, (1989), 'Child care quality: Compliance with regulations and children's development: The Pennsylvania study', in D. Philips (ed.) *Quality in Childcare: What Does Research Tell us*. Washington, DC: National Association for the Education of Young Children.
- Litjens, I. and M. Taguma (2010), "Literature overview for the 7th meeting of the OECD Network on Early Childhood Education and Care", OECD, Paris, www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/EDPC/ECEC%282010%293/REV1&doclanguage=en.
- LoCasale-Crouch, J., et al. (2012), "The role of the mentor in supporting new teachers: associations with self-efficacy, reflection, and quality", *Mentoring and tutoring: partnership in learning*, Vol. 20/3, pp. 303-323.
- LoCasale-Crouch, et al. (2008), "Pre-kindergarten teachers' use of transition practices and children's adjustment to kindergarten", *Early childhood Research Quarterly*, Vol. 23/1, pp. 124-139.
- Macquarie University, Semann and Slattery and Boon Wuttung Foundation (2016), "Transition to school – supporting reciprocal visits (Koorie focus)", Victorian Department of Education and Training, Melbourne.

- Maffeo, R. and C. Casali (2013), *Condivisione e confronto sul passaggio scuola dell'infanzia- primaria. [Sharing and dialogue on the passage preschool-primary school]*, www.comune.sanlazzaro.bo.it/aree-tematiche/scuola/progetti-di-qualificazione-3-5-anni/progetto_qualificazione_scolastica%203-5anni_web.pdf (accessed 9 May 2017).
- Manlove, E. E., and J. R. Guzell (1997), "Intention to leave, anticipated reasons for leaving, 12 month turnover of child care centre staff", *Early Childhood Research Quarterly*, Vol. 12/2, pp. 145-167.
- Manning, M., et al. (2017), "The relationship between teacher qualification and the quality of the early childhood care and learning environment", *Campbell Systematic Reviews*, No. 2017:1.
- Melhuish, E., et al. (2015), "A review of research on the effects of early childhood Education and care (ECEC) on child development", in *CARE project; Curriculum Quality Analysis and Impact Review of European Early Childhood Education and Care (ECEC)*, <http://ecec-care.org/resources/publications/>.
- Meade, A. et al. (2012), *Early Childhood Teachers' Work in Education and Care Centres: Profiles, Patterns and Purposes*, Te Tari Puna Ora o Aotearoa/New Zealand Childcare Association, Wellington, www.ecnz.ac.nz/sites/default/files/uploaded-content/website-content/Publications/early-childhood-teachers-work-in-education-and-carecentres-web-090812.pdf.
- Ministry of Education New Zealand (2013), "Annual ECE Census: Report 2013", Education Counts website, www.educationcounts.govt.nz/statistics/archived/ece2/number-of-ece-services-publications/annual-ece-summary-reports2.
- Ministry of Education, Science and Sport of the Republic of Slovenia (2017), *Slovenia Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education, Science and Sport, Ljubljana, www.oecd.org/edu/school/SS5-country-background-report-slovenia.pdf.
- Mitchell, L. and P. Cubey (2003), "Characteristics of professional development linked to enhanced pedagogy and children's learning in early childhood settings". Report for the New Zealand Ministry of Education, NCER, Wellington.
- MIUR (Italian Ministry of Education, Universities and Research) (2012a), *Indicazioni nazionali per il curricolo della scuola dell'infanzia e del primo ciclo di istruzione. [New National Curriculum guidelines for preschool and for the first cycle of education.]*, www.indicazioninazionali.it/J/ (accessed 10 February 2017).
- MIUR (Italian Ministry of Education, Universities and Research) (2012b), *Monitoraggio delle Indicazioni per la scuola dell'infanzia e del primo ciclo (Art. 1 DPR 89/2009). [Monitoring survey of National Curriculum Guidelines for Preschool and for the First Cycle of Education. (Art. 1 Presidential Decree 89/2009)]*, http://hubmiur.pubblica.istruzione.it/web/istruzione/prot2085_12.
- Molnar, A., et al. (1999), "Evaluating the SAGE program: a pilot programintargeted pupil-teacher reduction in Wisconsin", *Educational Evaluation and Policy Analysis*, Vol. 21/2, pp. 165-177.
- Montie, J. E., Z. Xiang and L. J. Schweinhart (2006), "Preschool experience in 10 countries: Cognitive and language performance at age 7", *Early Childhood Research Quarterly*, Vol. 21/3, pp. 313-331.
- Moon, J. and J. Burbank (2004), "The early childhood education and wage ladder; a model for improving quality in early learning and care programs", Policy Brief, Economic Opportunity Institute, Seattle WA, www.eoionline.org/wp/wp-content/uploads/early-learning/ECELadderModelImprovingQuality-Jul04.pdf.
- Muijs, D. and D. Reynolds (2003), "The effectiveness of the use of learning support assistants in improving the mathematics achievement of low achieving pupils in primary school", *Educational Research*, Vol. 45/83, pp. 219-230.

- Muijs, D., et al. (2004), "How do they manage? A review of the research on leadership in early childhood", *Journal of Early Childhood Research*, Vol. 2/2, pp. 157-169.
- Murnane, R. J., and R. J. Olsen (1990), "The effects of salaries and opportunity costs on length of stay in teaching: Evidence from North Carolina", *Journal of Human Resources*, Vol. 25/1, pp. 106-124.
- NAE (Skolverket) (National Agency for Education) (2014), *Övergångar inom och mellan skolor och skolformer* [Transitions within and between schools and school forms], National Agency for Education (Skolverket), Stockholm, www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FRecord%3Fk%3D3355.
- NAECS-SDE (2013), *The Power of Kindergarten: 10 Policies Leading to Positive Child Outcomes*, National Association of Early Childhood Specialists in State Departments of Education, <http://sau8.org/common/pages/DisplayFile.aspx?itemId=8830124>.
- NAEYC (2009), "NAEYC Standards for Early Childhood Professional Preparation Programs", A position statement of the National Association for the Education of Young Children, www.naeyc.org/files/naeyc/file/positions/ProfPrepStandards09.pdf.
- Nagel, B., et al. (2013), *Der Übergang zu Eltern eines Schulkindes und die wahrgenommene Unterstützung in der Kooperation mit Kindertageseinrichtung und Schule* [The transition to parents of a school child and the perceived support in the co-operation with the ECEC centre and school]. Project report. IFP, Munich.
- Naudeau, S., et al. (2011), *Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation*, World Bank, Washington D.C.
- Neuman, M. (2007), "Professional continuity", pp. 58-59, in Moss, P. and M. Woodhead (2007), *Early Childhood and Primary Education, Early Childhood in Focus 2: Transitions in the Lives of Young Children*, Milton Keynes, Open University.
- Neuman, M.J. (2005), 'Global early care and education: challenges, responses, and lessons', *Phi Delta Kappa*, Vol. 87/3, pp. 188-192.
- Neuss, N., J. Henkel, J. Pradel and F. Westerhold (2014), *Übergang Kita-Grundschule auf dem Prüfstand - Bestandsaufnahme der Qualifikation pädagogischer Fachkräfte in Deutschland* [Bringing transitions from ECEC centres to primary school to the test – an inventory of the qualifications of pedagogical staff in Germany], Springer Fachmedien, Wiesbaden.
- Norwegian Directorate for Education and Training (2017), *Norway Country Background Report on Transitions from ECEC to Primary School*, Norwegian Directorate for Education and Training, Oslo, www.oecd.org/edu/school/SS5-country-background-report-norway.pdf.
- Norwegian Directorate for Education and Training (2014) *Veileder: Overganger for barn og unge som får spesialpedagogisk hjelp eller spesialundervisning* [Guide: Transitions for children and young people who receive special education assistance or special needs education], www.udir.no/laring-og-trivsel/sarskilte-behov/overganger-spesialpedagogisk-hjelp-spesialundervisning.
- Norwegian Ministry of Education and Research (2008), *Veileder. Fra eldst til yngst*. [National guide. From the eldest to the youngest], Norwegian Ministry of Education and Research, Oslo, www.regjeringen.no/globalassets/upload/kd/vedlegg/barnehager/veileder/f-4248-fra-eldst-til-yngst.pdf.
- Norwegian Ministry of Education and Research (2012), *Kompetanse for kvalitet. Strategi for etter- og videreutdanning 2012-2015* [Competence for Quality – Strategy of Continuing Education and Training 2012-2015], www.udir.no/Upload/skoleutvikling/5/kompetanse%20for%20kvalitet.pdf?epslanguage=no.

Norwegian Ministry of Education and Research (2013), *Kompetanse for framtidens barnehage. Strategi for kompetanse og rekruttering 2014-2020* [Competence for the Future Kindergarten – National Strategy for Competence and Recruitment 2014-2020], www.udir.no/Upload/barnehage/Kompetanse_for_fremtidens_barnehage_2013.pdf?epslanguage=no.

Norwegian Ministry of Education and Research (2015), OECD – Thematic review of early childhood education and care policy in Norway. Background report, www.regjeringen.no/contentassets/6372d4f3c219436e990a5b980447192e/oecd_rapport_2015_kd_web.pdf.

OECD (2017a), Online Education Database, OECD, Paris, www.oecd.org/education/database.htm.

OECD (2017b), *Starting Strong 2017: Key OECD indicators on early childhood education and care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264276116-en>.

OECD (2016a), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.

OECD (2016b), *School Leadership for Learning: Insights from TALIS 2013*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264258341-en>.

OECD (2015a), *Education at a Glance 2015: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2015-en>.

OECD (2015b), *Immigrant Students at School: Easing the Journey towards Integration*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264249509-en>.

OECD (2014a), *New Insights from TALIS 2013: Teaching and Learning in Primary and Upper Secondary Education*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264226319-en>.

OECD (2014b), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2014-en>.

OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.

OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264228368-en>.

Pardo, M. and C. Adlerstein (2015), *Estado del arte y criterios orientadores para la elaboración de políticas de formación y desarrollo profesional de docentes de primera infancia en América Latina y el Caribe* [State of the art and orientation criteria for the elaboration of the training and professional development of pre-primary teachers in Latin America and the Caribbean], Secretaría Técnica Estrategia Regional sobre Docentes, UNESCO.

Peisner-Feinberg, E. S., et al. (1997), "The prediction of process quality from structural features of child care", *Early Childhood Research Quarterly*, Vol. 12/3, pp. 281-303

Peters, S. (2010), Literature Review: Transition from Early Childhood Education to School, Report to the Ministry of Education, Ministry of Education, Wellington, New Zealand.

Petriwskyj, A., K. Thorpe and C. Tayler (2014). "Towards inclusion: provision for diversity in the transition to school", *International Journal of Early Years Education*, Vol. 22/4, pp. 359-379.

Philips, D., P. Scarr and K. McCartney (1987), "Child care quality and children's social development", *Developmental Psychology*, Vol. 23, pp. 537-543.

Phillipsen, L., et al. (1997), "The prediction of process quality from structural features of child care", *Early Childhood Research Quarterly*, Vol. 12/3, pp. 281-303.

- 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.
- Pontecorvo, C. (1989), *Un curricolo per la continuità educativa dai quattro agli otto anni* [A curriculum for educational continuity from four to eight years], La Nuova Italia, Florence.
- Pontecorvo, C., G. Tassinari and L. Camaioni (1990), *Continuità educativa dai quattro agli otto anni* [A curriculum for educational continuity from four to eight years] La Nuova Italia, Scandicci.
- Pramling, N. and I. Pramling Samuelsson (2011), *Educational Encounters: Nordic Studies in Early Childhood Didactics*. Springer, Dordrecht.
- Rambøll (2010), Kartlegging av det pedagogiske innholdet i skoleforberedende aktiviteter i barnehager. [Mapping of the Pedagogical Content in School-Preparatory Activities in Kindergartens] Rambøll Management.
- Rambøll (2011), "Evaluering af undervisningssassister [Evaluating the effects of teaching assistants]", Rambøll, Copenhagen.
- Ramey, S. L., et al. (2000), Head Start Children's Entry into Public School: A Report on the National Head Start/Public School Early Childhood Transition Demonstration Study.
- Rickman, B. D., and C. D. Parker, (1990), Alternative wages and teacher mobility: a human capital approach, *Economics of Education Review*, Vol. 9/1, pp. 73-79.
- Rivkin, S. G., E. A. Hanushek, and J. F. Kain (2005), Teachers, schools, and academic achievement, *Econometrica*, Vol. 73/2, pp. 417-458.
- Rodd, J. (2001), "Building leadership expertise of early childhood professionals", *Journal of Early Childhood Teacher Education*, Vol. 22/1, pp. 9-12
- Rous, B., et al. (2010), "Practices that support the transition to public preschool programs: Results from a National Survey", *Early Childhood Research Quarterly*, Vol. 25/1, pp. 17-32.
- Rowan, B., R. Correnti, and R. J. Miller, (2002), What large-scale survey research tells us about teacher effects on student achievement: Insights from the Prospects Study of Elementary Schools, *Teachers College Record*, 104, pp. 1525-1567
- Russell, C. and C. Day (2010), "Transitions in Early Childhood: The case for a consistent, competent and stable workforce", in Kagan, S. L., and Tarrant, K. (Eds) (2010), *Transitions for Young Children: Creating Connections across Early Childhood Systems*, Brookes Publishing Company, Baltimore.
- Sammons, P. (2010), "The EPPE Research Design: an educational effectiveness focus" in Sylva et al. (eds.), *Early Childhood Matters: Evidence from the Effective Pre-school and Primary Education project*, Routledge, London/New York.
- Sargent, T., and E. Hannum, (2005), "Keeping teachers happy: job satisfaction among primary school teachers in rural northwest China", *Comparative Education Review*, Vol. 49, pp. 173-204.
- Shartrand, A.M., et al. (1997), New skills for new schools: Preparing teachers in family involvement, Harvard University, Medical School, Cambridge, MA.
- Sheridan, S. (2001), "Quality Evaluation and Quality Enhancement in Preschool – A Model of Competence Development", *Early Child Development and Care*, Vol. 166, pp. 7-27.
- Sheridan, S. (2009), "Discerning pedagogical quality in preschool", *Scandinavian Journal of Educational Research*, Vol. 53/3, pp. 245-261.

- Sheridan, S.M., et al. (2009), "Professional Development in Early Childhood Programs: Process Issues and Research Needs", *Early Education Development*, Vol. 20, pp. 377-401,
<http://dx.doi.org/10.1080/10409280802582795>.
- Shonkoff, J. P. and D. A. Phillips (2000), *From Neurons to Neighborhoods: The Science of Early Childhood Development*, National Academy Press, Washington DC.
- Siraj, I., and D. Kingston, (2015), An independent review of the Scottish early learning and childcare (ELC) workforce and out of school care (OSC) workforce.
- Siraj-Blatchford, I. and L. Manni, (2007), *Effective Leadership in the Early Years Sector (The ELEYS Study)*, Institute of Education, London.
- Siraj-Blatchford, I., et al. (2003), The Effective Provision of Pre-School Education (EPPE) Project, Technical Paper 10: Intensive Case Studies of Practice across the Foundation Stage. DfEE / Institute of Education, University of London, London.
- Slot, P. L., et al. (2015), "Associations between structural quality aspects and process quality in Dutch early childhood education and care settings", *Early Childhood Research Quarterly*, Vol. 33, pp. 64-76.
- Strauss, R. P. and E.A. Sawyer, (1986), "Some new evidence on teacher and student competencies", *Economics of Education Review*, Vol. 5/1, pp. 41-48.
- Stringher, C. (2017), *An Exploration of the Transition From Preschool To Primary Education In Italy*, Manuscript submitted for publication.
- Swedish Ministry of Education and Research (2017), *Sweden Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education and Research, Stockholm,
www.oecd.org/edu/school/SS5-country-background-report-sweden.pdf.
- Sylva, K., et al. (2004), *Effective Pre-school Provision*, Institute of Education, London.
- Sylva, K., et al. (1999), *The Effective Provision of Pre-school Education (EPPE) Project: Technical Paper 1-An Introduction to The Effective Provision of Pre-school Education (EPPE) Project*, Department for Education and Skills.
- Sylva, K., Siraj-Blatchford, I., and B. Taggart, (2010), *The Early Childhood Environment Rating Scales: Curricular extension to the ECERS_R*. (3rd Ed.), Trentham Books, Stoke:
- Sylva, K., et al. (2007), "Curricular quality and day-to-day learning activities in pre-school", *International Journal of Early Years Education*, Vol. 15, pp. 49-65.
- Teddlie, C. and D. Reynolds, (2000), "School effectiveness processes", in C. Teddlie and D. Reynolds (eds), *The International Handbook of School Effectiveness Research*, pp. 14-28, Routledge, London.
- Theobald, N. D., and M. A Gritz,. (1996), "The effects of school district spending priorities on the exit paths of beginning teachers leaving the district", *Economics of Education Review*, Vol. 15/1, pp. 11-22.
- Torquati, J., H. Raikes and C. Huddleston-Casas (2007), "Teacher education, motivation, compensation, workplace support, and links to quality of centerbased child care and teachers' intention to stay in the early childhood profession", *Early Childhood Research Quarterly*, Vol. 22/2, pp. 261-275.
- Torquati, J.C., H. Raikes, C.A. Huddleston-Casas (2007). "Teacher Education, Motivation, Compensation, Workplace Support, and Links to Quality of Center-based Child Care and Teachers' Intention to Stay in the Early Childhood Profession," *Early Childhood Research Quarterly*, Vol. 22, pp. 261-275,
<http://dx.doi.org/10.1016/j.ecresq.2007.03.004>.

- Turnšek, N. (2002), "Stališča in pogledi vzgojiteljic na vzgojo in novi predšolski kurikulum – nekaj rezultatov preskusne faze raziskovanja" [Standpoints and views of preschool teachers on education and the new Kindergarten Curriculum – some results of the test phase of research]. *Sodobna pedagogika*, Vol. 3, pp. 70-92.
- UNESCO Institute for Statistics (2015), ISCED Mappings, <http://uis.unesco.org/en/isced-mappings>.
- Vannebo, B. I., and K. Å. Gotvassli, (2014). "Early Childhood Educational and Care Institutions as Learning organizations", *Journal of Early Childhood Education Research*, Vol. 3/1, pp. 27-50.
- Wagner, B.D., L. French (2010), "Motivation, work satisfaction, and teacher change among early childhood teachers", *Journal of Research in Childhood Education*, Vol. 24, pp. 152-171.
- Welsh Government (2017), Wales Country Background Report on Transitions from ECEC to Primary School, Welsh Government, Cardiff, www.oecd.org/edu/school/SS5-country-background-report-wales.pdf.
- Whelan, S. (1993), "Involving staff", *Child Care Information Exchange*, Vol. 135, pp. 8-10.
- Whitebook, M. (2003), *Early Education Quality: Higher Teacher Qualifications for Better Learning Environments - A Review of the Literature*, Center for the Study of Child Care Employment, Berkeley, CA.
- Whitebook, M., S. Ryan (2011), *Degrees in Context: Asking the Right Questions about Preparing Skilled and Effective Teachers of Young Children* (Preschool Policy Brief No. 22), National Institute for Early Education Research, New Brunswick, NJ.
- Whitebook, M., et al. (2001), *Then and Now: Changes in Child Care Staffing, 1994-2000*, Center for the Child Care Workforce, Washington, DC.
- Woodhead, M. and P.Moss (2007) "Early Childhood and Primary Education: Transitions in the Lives of Young Children", *Early Childhood in Focus*, Vol. 2, Open University, Milton Keynes, UK.
- Zanetti, M.A. and Cavioni, V. (eds) (2014), SR 4-5. School readiness. *Prove per l'individuazione delle abilità di base nel passaggio dalla scuola dell'infanzia alla scuola primaria* [School Readiness. Tasks for the identification of basic abilities in the transition from preschool to primary school], Edizioni Centro Studi Erickson, Trento.
- Zaslow, M., et al. (2004), "The Role of Professional Development in Creating High Quality Preschool Education", Welfare Reform and Beyond Working Paper, Brookings Institution, Washington, DC.
- Zaslow, M., et al. (2010), *Towards the identification of features of effective professional development for early childhood educators: Literature review*, United States Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, Washington, DC.
- Zembylas, M., and E. Papanastasiou, (2004), "Job satisfaction among school teachers in Cyprus", *Journal of Educational Administration*, Vol. 42, pp. 357-374.

Chapter 4

Pedagogical continuity in transitions from early childhood education and care to primary school

Continuity in curricula and transition practices between early childhood education and care (ECEC) and primary school has a positive impact on children's later academic and social success. How are OECD countries ensuring that instructional techniques and strategies do not vary too much across children's various settings around the time they transition from ECEC to primary school? This chapter explores this question, drawing on a large survey of OECD countries and partner countries. It reviews curricular continuity between the last year of ECEC and the first year of primary school, outlining key trends – as well as similarities and differences – in curricular contents. It describes three main challenges highlighted by participating countries that are contributing to continued gaps in pedagogical continuity, along with a wealth of practical strategies for tackling them. Finally, it lists some pointers for policy development as food for thought for countries seeking to improve pedagogical continuity in transitions.

The data collected through the OECD questionnaire on transitions for Italy is published here under the responsibility of the National Institute of Evaluation of the Educational and Training System (INVALSI, Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione).

Key policy messages

Pedagogical continuity is improving, but gaps remain. Research tells us that:

- High-quality, child-centred staff-child interactions are associated with improved child development, well-being, socio-emotional and academic outcomes both at pre-primary and primary levels.
- Differences in pedagogical views of ECEC and primary school staff are an obstacle to pedagogical continuity. The joint creation of pedagogical transition practices by staff at both levels can facilitate children's adjustment to school and help them settle in.
- Curricula or guidelines for pedagogical transitions ensure continuity during transition and help children adjust to primary school.
- A balanced curriculum with roughly equal emphasis on play, self-regulation and pre-academic activities is associated with high-quality interaction with staff and effective pedagogical practices.
- Similar structural features in ECEC and primary school (i.e., group size, teacher-child ratios and day length) help to align children's daily experiences across levels.

International comparisons reveal some clear trends

- In 78% of participating jurisdictions, there is continuity in curricula between ECEC and primary school: 54% explicitly align the curricula for the two levels (e.g. Chile, the German Länders and Finland); while 24% have fully integrated curricula (e.g. Italy and Switzerland). Curricular continuity is more pronounced for literacy and language, numeracy, physical education, arts, music, social sciences, and science.
- ECEC curricula tend to be broad and holistic, while in primary education they are more subject-specific and regulated. This is the case in Japan and Denmark for example.
- Many jurisdictions have included new content areas in their pre-primary curricula to reflect today's society: these include information and communications technology (ICT) skills, foreign languages, ethics and citizenship values, and health and well-being. These additions bring the pre-primary curriculum more into line with primary education.
- The long-term stability of core content areas in pre-primary curricula suggests that the role of play and basic skills persists strongly.
- Age-specific developmental goals or learning standards are more common in primary school frameworks than in ECEC frameworks (in 45 vs. 35 jurisdictions), for instance in Norway, the Slovak Republic and Sweden.
- Most children have to cope with a less favourable staff-child ratio and consequently less adult support when moving to primary school. In Chile, the Czech Republic, most German Länders, Mexico and Turkey there can be up to 15 more children per staff member in primary school, raising challenges for continuity of learning and well-being.

Countries have developed a wealth of strategies to address pedagogical continuity challenges

Challenge 1. Differences and inconsistencies in curricula

- Strategy: Develop an integrated national curriculum framework and national guidelines, e.g. Slovenia, where both preschool and primary school teachers are actively involved in curricular development.
- Strategy: Invest in local knowledge and innovations, e.g. in Japan, local governments are formulating two unique transition period curricula.

Challenge 2: Lack of shared pedagogical understanding between the two systems

- Strategy: Reform curricula to ensure greater pedagogical continuity, e.g. Scotland's Curriculum for Excellence is a coherent 3-18 age group curriculum built around capacities and learning, rather than school subjects.
- Strategy: Provide opportunities for staff collaboration, e.g. in Portugal, preschool and primary school staff work in the same school building and on joint projects.

...

Key policy messages (continued)

- Strategy: Emphasise the role of primary school in receiving children, e.g. Sweden's curriculum sets out clear expectations for primary school teachers' activities during transitions.

Challenge 3: Inconsistent teaching during transitions

- Strategy: Ensure consistency in structures, e.g. Denmark's "Continuous School Start", which seeks closer co-operation between ECEC and primary school.
- Strategy: Plan collaborative strategies, e.g. in Wales, the Foundation Phase Action Plan includes several supportive approaches to improve consistency of delivery, including updating training, increasing parental engagement, and support materials.

Several policy pointers arise from this research

- Back up curriculum implementation with significant support and training for teachers and staff.
- Encourage active collaboration by teachers across settings to break down pedagogical boundaries.
- Develop ways of dealing with the increasingly complex nature of transitions.
- Build an evidence base for how pedagogical barriers can be overcome.

Introduction

The transition from ECEC to primary school represents a fundamental qualitative shift for children (Rimm-Kaufman and Pianta, 2000). ECEC settings and primary schools can be different physically and pedagogically (e.g. group size, pedagogical practices, curriculum); hence children's daily experiences can change abruptly while transitioning between these two types of learning environments (Ebbeck et al., 2013). For most children, transitions are satisfying and fulfilling, but for some children they can be challenging and stressful (Jindal-Snape, 2010). Therefore, the nature and smoothness of these transitions can be strongly influenced by decisions on pedagogical (and programme) aspects during the transition stage (Neuman, 2002; Sink, Edwards and Weir, 2007).

Pedagogy is of utmost importance for children's positive development (OECD, 2012). In educational literature, pedagogy has been conceptualised as the "scientific base for the art of teaching" and defined as the set of instructional techniques and strategies that enable children's learning to take place in educational settings (OECD, 2012; Siraj-Blatchford, 2010). Pedagogy refers not only to the actual practices and direct actions of a practitioner, but also to the way a practitioner implements the practices; how he or she intervenes or engages in activities and communicates with children; the way groups and practices are organised; and how the daily schedule is planned. Pedagogy is thus closely related to curriculum and will be influenced by the ideas about learning that underpin the curriculum (Stephen, 2006). In this report, pedagogical continuity refers to the pedagogical aspects that facilitate children's transitions from ECEC to primary school, including curricula and pedagogical approaches, learning standards and development goals, and structural aspects that affect children's daily ECEC and school experiences (OECD, 2012).

Pedagogical continuity in curricula and transition practices between early childhood education and care (ECEC) and primary school has a positive impact on children's later experiences and development (e.g. Ahtola et al., 2011; Margetts, 2007). Research, for instance, has shown that aligning ECEC and primary school curricula for transition is associated with children's improved literacy and maths skills (Ahtola et al., 2011). Yet overall it is surprising how little is known of the impact of continuity in pedagogical practices from ECEC to primary education (Stipek et al., 2017).

This chapter begins with an overview of the research on pedagogical continuity in transitions. It then draws on in-depth country reports by 8 OECD countries and 1 partner country,¹ and a questionnaire

completed by 27 OECD countries and 3 partner countries (Colombia, Croatia and Kazakhstan) in 2015/2016 to explore what countries are doing to promote pedagogical continuity (see Annex A at the end of this report). It reviews curricular continuity between the last year of ECEC and the first year of primary school, and key similarities and differences in curricular contents. The chapter also illustrates pedagogical approaches, practices and learning goals with examples from participating jurisdictions, as well as discussing the structural preconditions during the last year of ECEC and the first year of primary school that affect pedagogical practices and allow for a smooth transition. The chapter then identifies three key challenges highlighted by countries, and the strategies they have developed to address them. It concludes with a selection of policy pointers to inform future policy discussions.

Box 4.1 Key definitions

Throughout this chapter the term **early childhood education and care** (ECEC) will be used to refer to regulated arrangements that provide education and care for children from birth to compulsory primary school age (in **integrated systems**), or from birth to pre-primary education (in **split systems**). The International Standard Classification of Education (ISCED) is the reference classification for categorising education programmes and related qualifications by education levels and fields. The latest version (ISCED 2011) has nine levels of education, from level 0 to level 8, where ISCED 0 refers to early childhood education and ISCED 1 refers to primary education. Education programmes at ISCED level 0 are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02). The latter include ECEC centres that provide services for children to support early development in preparation for participation in school and society, and that accommodate children from age three to the start of primary education. The focus of this publication is on ISCED 02 and the terms pre-primary, preschool and ECEC are used interchangeably.

The term “**teacher**” is used in this report to refer to the person taking the lead at class or playroom level in pre-primary and primary settings, although a variety of other names are common across countries. **ECEC staff** refers to pre-primary and primary teachers and other staff members who can be involved in designing and implementing pedagogical transition in the two settings.

For more information, see the Glossary and OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, <http://dx.doi.org/10.1787/9789264228368-en>.

What does the literature tell us about pedagogical continuity during transition from early childhood education and care to primary school?

Curricula set the stage for pedagogical work

Curricula should provide clear and explicit pedagogical guidelines for staff to ensure that critical learning or development areas are covered (OECD, 2012). A curriculum refers to the contents and methods that substantiate children’s learning and development in the institutionalised ECEC and primary education. It answers the questions “what to teach?” and “how to teach it?” (NIEER, 2007). It is a complex concept, containing multiple components, such as goals, content and pedagogical practices (Litjens and Taguma, 2010), that are filtered through the surrounding social values and educational beliefs. Curricula also take a stance on children’s learning dispositions (e.g. through play, active participation); how they are enabled by staff’s decisions on material resources, social interactions and learning environments (Siraj-Blatchford, 2010); and how that will be presented to young children through adult- and child-initiated activities (Wood, 2005). Play does not constitute a curriculum, but should be an integral part of the curriculum because it provides potential spaces for learning and development (Wood, 2005). The presence of a curriculum can help ensure consistency among ECEC services and primary schools as they prioritise learning elements (learning areas) and provide common goals for staff, settings, and schools (Tarrant and Kagan, 2010). Previous studies also pinpoint the importance of sharing the curriculum, pedagogical strategies and educational processes with parents who, in turn, can also help in improving the child’s home learning environment (Siraj-Blatchford, 2010) (see Chapter 5).

Along with ideological objectives and values, curricula also define the contents or subject areas for children's learning that are considered crucial in the given context. A review of 11 European countries considered personal and social development, language and communication, knowledge and understanding of the surrounding world, creative expression, physical development and movement, ethical, religious and philosophical orientation as well as responsibility to be important areas of learning (Sylva, Erek-Stevens and Aricescu, 2015). These areas are most often referred to in European ECEC curricula (Sylva, Erek-Stevens and Aricescu, 2015). They are also largely in line with the content area of high-quality education suggested in the recent *Incheon Declaration for Education 2030* (UNESCO, 2015).

The use of curricula is positively associated with the development and learning of young children (Bierman et al., 2008; Clements and Sarama, 2008). For instance, a balanced curriculum with roughly equal emphasis on play, self-regulation and pre-academic activities is related to the highest observed quality of staff-child interactions, compared to a curriculum which places stronger emphasis on pre-academic learning (Slot et al., 2016). A study by Hedges and Cooper (2015) also suggests that children's keen participation in play-based teaching and learning in early childhood education benefits their holistic and dynamic outcomes (i.e., flexibility in combining content and processes of thinking and understanding). Unfortunately, large-scale studies of ECEC suggest too few adults have the necessary skills to provide optimal learning support and emotional support for young children's intellectual growth, particularly in the curriculum areas of science, mathematics and numeracy (Howes et al., 2008). This is important as research shows that meaningful instruction in numeracy and science is a very good predictor of future academic success (Duncan et al., 2007). The importance of good foundations in language development and literacy to support later learning is also well documented (Sylva et al., 2004; Coghlan et al., 2009).

Curricular continuity affects child development and adjustment to school

Standards and curricula used in classrooms can greatly affect children's experience in early childhood settings. The alignment (or lack of alignment) among standards and curricula used in different settings (Wood and Bennet, 2001) has important implications for the degree to which children experience continuity as they transition from one setting to another (Kagan et al., 2006).

The type of curricula or educational programme matters to child development. For instance, in Northern Ireland, adopting a play-based and developmentally appropriate curriculum (Enriched Curriculum) in primary school grades 1 and 2 (four to five-year-old children) eased children's transition from preschool (pre-primary education) to primary school and led to children's improvement in reading test scores (Walsh et al., 2010). Further, primary school teachers considered that children were more enthusiastic about the learning process in general when the Enriched Curriculum, rather than more teacher-directed curriculum, was applied (Sproule et al., 2005).

Finnish research also shows that co-operation on curriculum issues between pre-primary and primary school teachers is one of the most important factors influencing children's later academic performance (Ahtola et al., 2011). Likewise, this type of co-operation is positively associated with primary teachers' perceptions of children's skills in the United States (LoCasale-Crouch et al., 2008). Children were judged by their first-grade teachers to have more positive social competencies and fewer problem behaviours when they had attended pre-primary education (last year of ECEC) in which more transition activities were implemented. Mutually prepared curricula aid in creating continuity between pre-primary education and school, while providing a possibility for pre-primary and primary school teachers to meet and discuss their conceptions and aims regarding the child's education and upbringing (Ahtola et al., 2011). Shared curriculum work requires respect and equality between ECEC and primary education (Bennet, 2013; Moss, 2013; see Chapter 3). ECEC staff have an understanding of young children's accumulated experiences in the early years, as ECEC often emphasises children's holistic development and distinctive learning strategies, which require

listening and supporting the child as an individual and social learner (Bennet, 2013). Primary school teachers for their part can provide a curriculum that builds on children's earlier learning, sets realistic expectations or outcomes for learning at this stage and incorporates early childhood pedagogy (Palmer, 2015). However, it is worth paying attention to what extent such approaches by primary education are implemented in practice. When staff members deliberately pay attention to children's transitions, they increase awareness of the instructional objectives and strategies of staff from both sectors (Abry et al., 2015).

Pedagogy affects transition

Shared curricula can go a long way towards breaking down barriers between schools and ECEC services (Palmer, 2015); however, joint building of pedagogical continuity in the curriculum is rather infrequent (Ahtola et al., 2011). Pedagogical continuity is constructed through other means as well. The literature acknowledges that the quality of staff and their activities, interactions with children and pedagogical knowledge and practice have a large impact on children's well-being and development (Fukkink, 2011; Hamre et al., 2012; OECD, 2012). Thus, daily pedagogical practices, such as applying high-quality staff-child interactions, as well as child-centred and teacher-directed activities² (e.g. Schweinhart and Weikart, 1988; Stipek and Byler, 2004; 2005) are meaningful for children's daily experiences, both in ECEC (OECD, 2015a) and in primary education. This suggests the importance of pedagogical continuity between the two settings. At the same time, very limited research has been done on exactly what elements of instructional approaches and pedagogical practices should be aligned across transitions, and the impact of instructional continuity on children's outcomes (Stipek et al., 2017). It is nevertheless reasonable to suppose that pedagogical transition practices, deployed jointly by staff in ECEC (particularly in the pre-primary phase) and in primary school to enable the transition, can further bridge and reduce the discontinuities in pedagogy between ECEC and primary school (e.g. LoCasale-Crouch et al., 2008).

High-quality pedagogical practices in early childhood education and care and in primary school set the stage for transition

The positive impact of high-quality staff-child interactions on child outcomes has been demonstrated both in ECEC and in primary school. For instance, staff-child interaction that encourages reciprocal learning discussions, provides support for deeper thinking skills and expands understanding is positively associated with children's early maths and language skills in ECEC (Mashburn et al., 2008), and with gains in literacy skills in primary school (Cadima, Leal and Burchinal, 2010; Curby, Rimm-Kaufman and Ponitz, 2009). Further, warm, sensitive and responsive interactions by staff are positively associated with children's improved social skills in ECEC (La Paro, Williamson and Hatfield, 2014). In particular, the combination of high-quality emotional support by staff and well-managed classroom organisation during the last two years of ECEC predict children's better social skills and fewer behaviour problems in both kindergarten (pre-primary education) and first grade (Broekhuizen et al., 2016). When children are addressed with clear behavioural expectations, and instruction is modified according to children's emotional and cognitive needs, children show less behavioural problems in ECEC (LaParo et al., 2014; Vandell et al., 2010). In primary school, this organisational support by staff has also been associated with better vocabulary and print concept skills (Cadima, Leal and Burchinal, 2010).

Research also shows that a higher level of child-centred teaching practices in pre-primary classrooms (during the last year of ECEC) is associated with children's better reading skills upon entering school, and predicts children's reading and maths skills development during the first school year (Lerkkanen et al., 2016). In a similar vein, more child-centred pedagogy in ECEC settings is associated with improved socio-emotional development and contributes to higher motivation for maths and literacy (Lerkkanen et al., 2012). The use of teacher-directed activities has also been

associated with some positive child outcomes (letter and word recognition) in primary education (Stipek et al., 1995), but overall children tend to benefit more from child-centred practices. In general, pre-primary teachers' instructional patterns are more child-centred and primary school teachers' patterns more of a mix of teacher-directed and child-centred approaches (Uibu, Kikas and Tropp, 2011). A limited body of research on stability and change in classroom characteristics shows that instructional activities become more teacher-directed and structured in the first grade compared to pre-primary education (La Paro, Rimm-Kaufman and Pianta, 2006).

Different pedagogical conceptions in early childhood education and care and in primary education challenge pedagogical collaboration

The deliberate collaboration between pre-primary teachers and primary school teachers plays a key role in transition processes. At best, building a coherent pedagogical continuum from ECEC to primary school is a joint endeavour to which staff in ECEC and school can equally contribute. Nevertheless, it is often difficult to establish a pedagogical continuum that equally acknowledges the pedagogy and views of staff members in both systems (Lillejord et al., 2017). In several countries across Europe, ECEC pedagogy has a long tradition of relying on a comprehensive approach (i.e., with a focus on cognitive development as well as on social and emotional development and well-being; Alatalo, Meier and Frank, 2016), whereas primary school is more often academically oriented. This creates tensions in the delivery of pedagogy between the two settings. The literature also suggests that there is a certain downward push from formal schooling towards ECEC, particularly in terms of the last year of ECEC (Bassok, Latham and Rorem, 2016). ECEC staff worry that creating a continuum can be at the expense of narrowing instruction toward a set of academic skills, leaving less time for social-emotional development and play (Miller and Almon, 2009). Stipek et al., (2017) argue that while increasing attention to social-emotional development in the primary grades may be desirable, simply "pushing up" traditional ECEC into primary education is no more a solution to discontinuity than pushing down primary education into ECEC. A promising approach is to involve change in both directions: an increased emphasis on academic learning opportunities in ECEC and on social-emotional development in the early primary grades, to create a continuum based on a balanced curriculum across transition.

The key to the process of successful pedagogical transition is to understand that elements of pedagogical instruction during transition should remain the same, while reflecting the child's development and learning evolution, to gradually build on previous experiences and learning (Stipek et al., 2017). Stability in particular practices or routines (i.e., instructional approaches and social context) helps children to predict what they are expected to do and how, as well as to feel safe in the classroom. At the same time, children need to gradually become more self-directed, and instruction should also become more complex in order to support children's developing cognition. This, above all, calls for staff's shared pedagogical planning across levels. Reconciling views by staff in both sectors on the child, knowledge and learning can lead to a "hybrid pedagogy"³ being applied, especially during the transition year. This approach combines the best parts of both sectors' conceptions of learning and development, and by doing so, allows a smooth experience for children (Lillejord et al., 2017).

Effective pedagogical transition practices support pedagogical continuity

Peters (2004) found that transition practices that suited one group of participants were sometimes problematic for others, and children who started the same class, on the same day, had different experiences at school. This emphasises that transition practices need to be pedagogically adapted to the individual child and group of children, which requires collaboration and shared understanding from the staff of both sectors. Pedagogical transition practices that are jointly created by ECEC and primary school staff together with parents and children (see Chapter 5) (e.g. formal and informal

visits, exchange days, use of transition folders), facilitate children's adjustment to school and children's exposure to the variety of experiences which they will encounter in primary schooling (e.g. whole class, larger groups, individual work) (Ackesjö, 2013; Chan, 2012). Such practices can further help children become more familiar with the school environment, helping them to settle in more easily (Abry et al., 2015).

Co-operation on curriculum issues between pre-primary education (last year of ECEC) and primary school staff can be further complemented with a range of activities. These can include passing on written information about children from pre-primary education to primary school; personal meetings between the family and the primary school teacher before school starts; and concrete co-operation between pre-primary and primary school teachers. These practices have been associated with children's improved academic skill development from pre-primary education to grade 1 in Finland (Ahtola et al., 2011). Familiarisation with school, in particular, is considered one of the most important transition practices, and involves parents, pre-primary and primary school teachers (Ahtola et al., 2016). It is particularly important for children as it helps them perceive the transition process as more transparent and predictable (Ackesjö, 2013). This can be achieved by the pre-primary group visiting the elementary school or by having the primary school teacher and/or pupils visit the pre-primary group (see Chapter 5).

Research also shows that the responsibility for successful transitions does not rest with the school alone; the importance of organisation-level co-operation and staff co-operation needs to be emphasised in schools and with local authorities (Ahtola et al., 2016; Geiser, Horwitz and Gerstein, 2013). This is a challenge also for policy makers, requiring both top-down and bottom-up activities to enhance the implementation and development of transition practices. The use of local- and school-level curricula and other formal documents (top-down) aids in systemising transition practices across municipalities, elementary schools and ECEC settings as well as providing guides for activities that schools can implement (Ahtola et al., 2012). At the same time, the importance of bottom-up processes, such as transferring information on school entrants between parents, pre-primary teacher and primary-school teacher, are emphasised. These use existing local resources and initiatives developed by active professionals in implementing and developing transition practices (Ahtola et al., 2012; 2016).

Structural features influence pedagogical continuum

The transition to primary school also means structural changes for many children, since the physical surroundings in ECEC and primary school can be very different in terms of location and size, as can the length or structure of the day. These differences also have consequences for the pedagogy being delivered. Studies have, for instance, shown a shift in classroom activities towards more seatwork, less free time and fewer activities organised in centres (typically including high degree of choice for children) when children transition from pre-primary education to first grade (La Paro, Rimm-Kaufman and Pianta, 2006), possibly due to a shift in structural features of the two settings.

Class-size and staff-child ratio affect pedagogy

Staff-child ratios may vary between ECEC and primary school classrooms and often ratios are less favourable in primary schools than in ECEC settings (e.g. Ebbeck et al., 2013). Increased group size and larger staff-child ratios change the nature of staff-child interactions and pedagogical work. In ECEC settings, daily work is often built upon collaboration and a division of labour between professions. In schools, teachers have the sole responsibility for the students' learning and for decision making (Karila and Rantavuori, 2014). In terms of pedagogy and the experience of the individual child, this means that there is less time in school for individual attention from the teacher. Even with small

classes the decrease in staff-child ratios means that teachers have less time to respond to children on an individual level (Pianta, 2004). Although some children may do well in large classrooms (Li, Nirmala and Tse, 2012), according to research this is not usually the case for children from low-income, disadvantaged or second-language backgrounds. Such children need smaller classes and more individualised instruction in order to follow their own learning paths and consequently reach their full learning capacity (Bennett, 2007).

There is only limited evidence on the impact of group size on children's academic outcomes (Magnuson, Ruhm and Waldfogel, 2007; Phillips, McNaughton and MacDonald, 2004; Yan and Lin, 2005). Furthermore, even fewer studies have explored the impact of group size on delivery of pedagogy (e.g. Hattie, 2005; Brühwiler and Blatchford, 2011). Moderate gains have been associated with small group size in reading and maths, particularly for some children from minority groups and low socio-economic backgrounds in first grade (five to six-year-olds) in the United States (Yan and Lin, 2005). Smaller group size is also associated with gains in literacy achievement at the beginning of primary education, both in the United States (Magnuson, Ruhm and Waldfogel, 2007) and in New Zealand (Phillips, McNaughton and MacDonald, 2004). Children who lag behind in literacy when entering primary school are able to catch up quickly in small classes with high-quality reading instruction. By contrast, initial disparities in literacy persist for children in large classes and with lower levels of reading instruction (Magnuson et al., 2007). However, contradictions in the evidence prevail (Yan and Lin, 2005), while a body of studies does not find any difference between small and large group size when it comes to student achievement (e.g. Blatchford and Mortimore, 1994; Iacovou, 2002).

There is a shift in the research away from seeking links to child outcomes towards modelling the impact of group size on group processes such as teaching quality or participation (Brühwiler and Blatchford, 2011). Research on pedagogy in primary education finds that the smaller group size has a positive effect, but adaptive teachers have a stronger effect on students' learning progress, independent of group size (Brühwiler and Blatchford, 2011).

As noted above, the literature and studies are inconclusive on group size and pedagogy and therefore caution is required when making any causal interpretations between the two. Group size is only one factor influencing the quality of pedagogy, and there are many other aspects that need to be considered simultaneously. Furthermore, the issue of group size also needs to be placed in the wider social and cultural domain of any educational system (Hattie, 2005). For instance, individualistic societies may emphasise the importance of smaller groups more than collectivistic societies. It therefore seems that on its own, a small group does not guarantee a high-quality learning experience (Stephen and Cope, 2003). Reducing group sizes will not lead to changes unless the staff also change the way that they teach to optimise the opportunities presented by having fewer students (Hattie, 2009). This suggests the need for deliberate planning and coherence in terms of group size during transitions from ECEC to primary school.

Hours of participation in early childhood education and care and in primary school affect pedagogy

The number of hours spent in ECEC and primary school can vary considerably depending on which type of programme the child attends. The benefits of having similar programme structure in both ECEC and primary school have not been studied; the links between half and full-day programmes on children's outcomes have hardly been studied either (Yan and Lin, 2005; Sammons, 2010).

Full-day programmes (five to six hours a day, five days a week) are associated with children's improved reading, maths and general knowledge achievement during the last year of ECEC in the United States (Yan and Lin, 2005). In the same cultural context, full-day programmes are also likely to be particularly beneficial for economically disadvantaged children (Zvoch, 2009). For example, full-day programmes have been shown to be beneficial particularly to vulnerable children in Ontario,

Canada (Ministry of Education, Government of Ontario, 2013).⁴ Some findings are contradictory, however; for instance in a study in England and Wales, full-time attendance did not lead to better outcomes for children than part-time provision (Sylva et al., 2004; Sammons et al., 2004). At the same time, a limited body of research suggests that a full-day programme during the last year of ECEC can lead to a smooth transition to primary school in terms of pedagogy, i.e. by allowing a more relaxed pace in ECEC and adequate time for preparing for transition (Winters, Saylor and Phillips, 2003). In other words, the longer day gives staff the opportunity to develop a more complete and multifaceted programme, while children can be more involved in planning of activities as well as in more process-oriented activities (Yan and Lin, 2005). By and large, however, there is little longitudinal evidence that the positive impact of attending a full-day programme during the last year of ECEC persists beyond first grade (Cannon, Jacknowitz and Painter, 2006), not to mention the impact of these aspects on the pedagogical continuum between ECEC and primary school.

Several research gaps remain to be filled

When considering the rapidly growing interest in transition between ECEC and school, it is surprising how little is known on the impacts of pedagogical continuity on children's later adjustment to school or their learning outcomes. Research findings have so far demonstrated the need for and impact of shared curriculum guidelines (Kagan et al., 2006; Walsh et al., 2010) and collaboration between ECEC and primary school on curriculum development (Ahtola et al., 2011), but very little is known about the pedagogical processes that achieve smooth transition for children. This means that although much is known about what high-quality pedagogy and staffs' practices look like in ECEC (La Paro, Rimm-Kaufman and Pianta, 2006) and in primary education (Cadima, Leal and Burchinal, 2010), the benefits of having similar pedagogical starting points (i.e. pedagogical practices, forms of instruction) in both sectors and in terms of transition have not been explored comprehensively (Stipek et al., 2017). Furthermore, research-based evidence on the impact of structural group characteristics (i.e. staff-child ratio, group size and hours of attendance) on pedagogical continuity is not yet sufficient. A holistic inspection of pedagogical continuity would benefit from a more nuanced understanding of the important factors affecting children's experiences during transition from ECEC to primary education and would further solidify the strong links between pedagogy, curriculum, and policy making (Tarrant and Kagan, 2010).

To what extent are countries ensuring pedagogical continuity?

How are pedagogical transitions currently organised in the jurisdictions that participated in this study? This section first reviews what kind of curriculum frameworks exist in participating jurisdictions and the extent to which curricula (covering at least the last year of ECEC and the first year of primary education) are aligned or integrated. It explores the differences in content areas, as well as differences in daily schedules between ECEC and primary school. Comparisons of pedagogical features of ECEC and primary school shed light on pedagogical continuity within systems.

Curriculum frameworks are in place in early childhood education and care and in primary education

The OECD survey on transitions was completed by 30 countries made up of 57 jurisdictions (see Annex A at the end of this report). Six jurisdictions that provided data for Starting Strong IV were also included here to compare curriculum frameworks. Table 4.A.6 in Annex 4.A shows the curricula in place in ECEC and primary education across all participating jurisdictions, while Table 4.1 summarises the degree to which jurisdictions have aligned their curricula.

Table 4.1 illustrates the general patterns of curricula in participating jurisdictions, and reveals the wide range of curricular documents in place in ECEC and primary education. Thus, transitions

within ECEC and transitions from ECEC to primary education are paved with multiple combinations of curricular documents.

Table 4.1 shows that nearly every jurisdiction (61 out of 63) has a curriculum in place for primary education (ISCED 1). At the same time, 9 jurisdictions (Czech Republic, Greece, Italy, the Netherlands,⁵ Poland, Portugal, Slovak Republic, Spain and Switzerland) have no ECEC curriculum for children under three years of age; however, they do have a more systematic curriculum in place starting from around the age of three. These findings indicate large variation among jurisdictions on how the early years of educational systems, in particular, are covered.

Table 4.1 Comparison across jurisdictions of curriculum frameworks in place for early childhood education and care (ISCED 01 and ISCED 02) and for primary education (ISCED 1)

 Mainly child care provision Pre-primary education provision or integrated early childhood education and care (ECEC) Compulsory primary schooling (ISCED 1)				
Type of curriculum frameworks in place in jurisdictions in ECEC and in primary education	ISCED 01 Early childhood educational development and care	ISCED 02 Pre-primary education	ISCED 1 primary education	Jurisdictions
No curriculum in place for ECEC (ISCED 01) but curriculum for integrated care and education in place for ECEC (ISCED 02) (n = 5 jurisdictions)	No ECEC curriculum	ECEC curriculum for childcare and education	Curriculum for primary education	Czech Republic, Greece, Portugal, Slovak Republic, Spain
Curriculum in ECEC split into different curricula for childcare (ISCED 01) and early education (ISCED 02), applied consecutively by age of child (n = 6 jurisdictions)	ECEC curriculum for childcare only	ECEC curriculum for childcare and early education	Curriculum for primary education	Belgium – Flemish Community, Canada: Saskatchewan and Quebec ² , Japan, Korea, Turkey
Curriculum for integrated care and education in place for whole ECEC for both ISCED 01 and 02 (either one or several documents) (n = 18 jurisdictions)	ECEC curriculum for childcare and education	ECEC curriculum for childcare and education	Curriculum for primary education	Australia, Austria, Belgium – French Community, Chile, Colombia, Denmark, Finland, France, Germany: Berlin, Bremen, Lower Saxony, and Saarland, Hungary, Mexico, Norway, Slovenia, England (UK)
One single curriculum document covers at least the last year of ECEC (ISCED 02) and the first year of primary school (ISCED 1) (n = 9 jurisdictions)	Large variety in curricula for childcare/care and education framework for ISCED 01 OR no curriculum place at all	Curriculum for at least the last year of ECEC	and first year of primary education	Canada: New Brunswick and Prince Edward Island, Italy, The Netherlands, New Zealand, Sweden, Switzerland, Scotland (UK) ² , Wales (UK)

Table 4.1 Comparison across jurisdictions of curriculum frameworks in place for early childhood education and care (ISCED 01 and ISCED 02) and for primary education (ISCED 1) (continued)

 Mainly child care provision Pre-primary education provision or integrated early childhood education and care (ECEC) Compulsory primary schooling (ISCED 1)				
Type of curriculum frameworks in place in jurisdictions in ECEC and in primary education	ISCED 01 Early childhood educational development and care	ISCED 02 Pre-primary education	ISCED 1 primary education	Jurisdictions
Several curriculum frameworks/documents exist, one of which covers at least the transition from ECEC (ISCED 02) to primary school (ISCED 1) (n = 25 jurisdictions)	Curriculum for ECEC and primary education (childcare/care and education)			Canada: Alberta, British Columbia, Manitoba, Newfoundland and Labrador, Northwest territories, Nova scotia, Nunavut, Ontario, and Yukon. Croatia, Germany: Baden-Württemberg, Bavaria, Brandenburg, Hamburg, Hesse, Mecklenburg-Western Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saxony, Saxony-Anhalt, Schleswig-Holstein, and Thüringen. Ireland ³ , Luxembourg, Poland
	Additional curricula or appendices (childcare/care and education) in place from 0 or from 3/4/5 onwards in some jurisdictions	Curriculum for primary education		

Notes: Information on curriculum frameworks is based on 63 countries and jurisdictions. Curriculum refers here to national core curriculum, curricular framework documents, educational standards or other official guiding documents in place in jurisdictions. In cases where a curricular document does not have an official status, or its application is optional, the name of the jurisdiction is **bolded**: **British Columbia (Canada)**: British Columbia Early Learning Framework (0-5) and BC Ministry of Education Curriculum for Kindergarten (5) are optional curricula. Where the optional BC Ministry of Education Curriculum for Kindergarten is applied in kindergarten, there is curricular continuity between pre-primary education and primary education. **Yukon (Canada)**: British Columbia Early Learning Framework (0-5) and BC Ministry of Education Curriculum for Kindergarten (5) are optional curricula. In case the BC Ministry of Education Curriculum for Kindergarten (optional) is applied already in kindergarten, curricular continuity is established also between pre-primary education and primary education. **The Netherlands**: There is no national curriculum in place. Core objectives (4-12) describe the end of the learning process in primary school and not the content or process itself.

1. In Quebec, Childcare curriculum (Meeting Early Childhood Needs: Québec's Educational Program for Childcare Services) is not mandatory and the Preschool Education Program Full-day Kindergarten for 4 year-olds is only in use in disadvantaged areas.

2. In Scotland, there is curricular continuity from pre-primary education to primary education.

3. In Ireland, the primary school curriculum stretches across the transition (age 4 onwards).

As Table 4.1 indicates, six jurisdictions (out of 63) have two different curricula for childcare and early education. These are usually implemented consecutively according to the child's age. This is evident for instance in Korea, where *The Standardised Childcare Curriculum* for zero to three-year-olds is followed by an early childhood education and care curriculum (*Nuri Curriculum*) for three to six-year-olds before children transition to primary education. The curriculum changes as children grow older and the age group changes.

Table 4.1 further indicates that in 18 of the 63 jurisdictions, ECEC from birth or the first year of life onwards is covered by an integrated curriculum of care and education. Care and education curricula cover ECEC until the start of primary education (usually until five or six years of age). This is typical in nearly all the Nordic countries (Denmark, Norway and Finland), as well as in France and Austria. Even while the combined care and education curricula set the stage for pedagogical continuity in ECEC, transition to primary education means a transition to a different curriculum.

Nine jurisdictions (out of 63) have one single curriculum document in place that covers at least the last year of ECEC and the first year of primary school; this is the case in New Brunswick (Canada), Prince Edward Island (Canada), Italy, the Netherlands, New Zealand, Sweden, Switzerland, Scotland (United Kingdom), and Wales (United Kingdom). For instance, Scotland's *Curriculum for Excellence*

spans ages 3 to 18 and the “early level” combines care and education, emphasising the belief that they cannot be separated. In Italy, the same curriculum (*National Curricular Guidelines for Preschool and for the First Cycle of Education*) covers the age range 3 to 14. In New Brunswick (Canada), the curriculum for primary education (*Curriculum for Compulsory School K-2*) also covers the last year of ECEC (compulsory pre-primary education). Despite full curricular coverage across the transition from pre-primary education to primary education, in four out of these nine jurisdictions, early years in ECEC (before two to three years of age) are not covered by a curriculum.

Finally, 25 of the 63 jurisdictions have several curriculum documents for ECEC and primary education, one of which covers the transition from ECEC to primary school (Table 4.1). This is typical for instance in nearly every German Länder, as well as in some Canadian jurisdictions. For instance, in Thüringen (Germany), a general educational plan exists for a broad age span (from 0–18 years of age) covering the whole range from ECEC (ISCED 01 and 02) and on to primary education (ISCED 1). However, there is a separate curriculum for primary school (from age six onwards) in place alongside this. Poland also has a similar organisation of its curriculum documents, whereby the curriculum (*Core Curriculum for Preschool and General Education in Individual Types of Schools*) extends from 3 to 18 years of age. This document is annexed by a curriculum for three to seven-year-olds (*Core Curriculum for Preschool Education in Kindergartens and Other Forms of Preschool Settings*). Additionally, the core curriculum for general education in primary schools is applied from age seven onwards in primary schools.

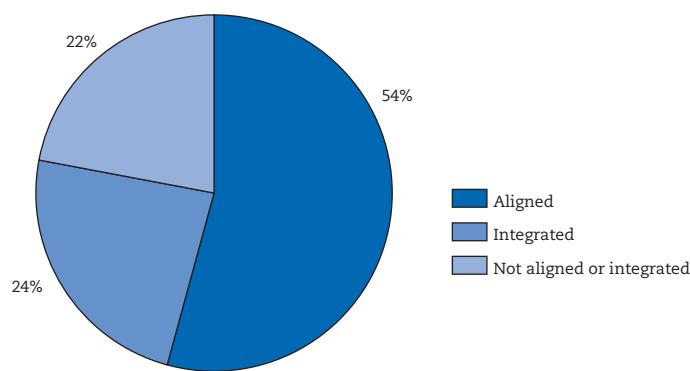
To sum up, in 32 jurisdictions (out of 63) children’s pathway from pre-primary to primary education is guided with at least one bridging curriculum. For the rest of the jurisdictions the curricular structure around this transition is more fragmented. The following section will explore to what extent there is thematic and structural alignment between curriculum documents during the last year of ECEC and the first year of primary education in participating jurisdictions.

Curricula covering the last year of early childhood education and care and the first year of primary school tend to be aligned

Curricular alignment refers to the coherence and continuity between ECEC and primary school curricula in terms of content, pedagogy and/or development goals during the transition year (i.e., covering at least the last year of ECEC and the first year of primary education). Figure 4.1 shows that in 78% of jurisdictions, the curricula during the last year of ECEC and the first year of primary school tend to be aligned, although the way in which they are aligned varies between jurisdictions. In 24% of the jurisdictions (14 jurisdictions out of 59), the curriculum framework for at least the last year of ECEC is fully integrated with the primary school curriculum, usually consisting of one curriculum document.

In addition, in around half of the jurisdictions (32 jurisdictions out of 59), the ECEC curriculum for at least the last year of ECEC is aligned with the curriculum of primary education. Alignment means that curricula are described in separate documents for each level of education, with age-specific goals and perspectives, but the documents are thematically aligned to facilitate pedagogical continuity.

On the other hand, in another 22% of jurisdictions (13 jurisdictions out of 59) the ECEC curriculum at least for the last year of ECEC is neither aligned nor integrated with the primary education framework (see also Table 4.A.1 in Annex 4.A). This means that there are separate curriculum documents in place for ECEC and primary education, and that within these documents goals, guidelines or content structures do not intentionally or explicitly consider transition from ECEC to primary education.

Figure 4.1 In most jurisdictions ECEC and primary curricula are either aligned or integrated (2016)

Note: Information on curricula is based on 59 countries and jurisdictions; see Table 4.A.1 in Annex 4.A for jurisdiction-specific details.
 Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495617>

Integrated curricula typically involve a single document that covers shared themes, goals and perspectives for a relatively broad age span, including (at least) the last year of ECEC and first years of primary school, with separate contents to match each age group. For example, in Poland the same curriculum (*The Core Curriculum for Preschool and General Education in Individual Types of Schools*) covers both pre-primary and primary education – children between 3 and 18 years old – but has separate (scaled) content for each level (see Table 4.A.6, Annex 4.A).

In Italy, the same curriculum covers the education of children between 3 and 14 years of age (National Curricular Guidelines for Preschool and for the First Cycle of Education). In Croatia a common curricular guideline (*National Strategy for Science, Education and Sports*) covers children between the ages of 6 months and 18 years; and in Canada (Quebec), from 4 to 17 (*Programme de formation de l'école québécoise*). By contrast, in Wales (United Kingdom) the integrated curriculum covers a narrower time span, namely children between three and seven (*Foundation Phase Framework*). In Sweden, the curriculum (Lgr 11) covers ages 6 to 16, but includes a particular chapter for preschool class (pre-primary education). The curricula in both Wales (United Kingdom) and Sweden pay particularly focused attention to curricular continuity around school entry, and gradually prepare children for the learning dispositions required in primary school (Box 4.2).

In the majority of jurisdictions (32 out of 59), the curricula in ECEC and primary school are explicitly aligned. This means that curricula are described in separate documents for each level of education, with age-specific goals and perspectives, but the documents are thematically aligned to facilitate pedagogical continuity. For instance, in Japan the ECEC and primary education curricula are aligned through common goals and values. The curricula do not directly include the same contents, but continuation is encouraged by suggesting both levels are part of an education which aspires for ideal forms of individuals and members of society. In Slovenia, pedagogical continuity during the transition phase has been constructed on a national level through aligned structures for content areas in ECEC and primary education curricula, as well as through adding an explicit statement on the need for vertical and horizontal alignment between the two documents (Box 4.3).

Twenty-two percent of jurisdictions (13 out of 59) reported that the ECEC and primary education curricula are **neither aligned or integrated**. This means that there are separate curriculum documents in place for ECEC and primary education and that within these documents goals, guidelines or content structures do not intentionally or explicitly consider the transition from ECEC to primary education. Such is the case for instance in Belgium (Flemish Community), Czech Republic, Denmark and Turkey.

Box 4.2 Case study: Curricular integration between the last year of ECEC and the first year of primary school: examples from Wales (United Kingdom) and Sweden

In Wales (United Kingdom), pedagogical continuity between ECEC and primary school rests explicitly on one extended curriculum, the 2009 Foundation Phase curriculum that covers three to seven year-olds. In practice, children transfer from ECEC to primary school at the age of five under the guidance of this one curriculum, reflecting full integration between ECEC and primary school. The Foundation Phase curriculum is planned as a progressive framework to meet the diverse needs of all children, including those at an earlier stage of development and those who are more capable. The Foundation Phase curriculum is flexible, with a broad range of activities, learning and development skills set out for the following areas of learning that support the development of children and their skills: 1) Personal and Social Development, Well-being and Cultural Diversity; 2) Language, Literacy and Communication Skills; 3) Mathematical Development; 3) Welsh Language Development; 4) Knowledge and Understanding of the World; 5) Physical Development; and 6) Creative Development. The areas of learning need to complement each other and should not be approached in isolation, thus emphasising children's holistic development. Pedagogy and principles are scaled to each age group to meet their specific needs. Further guidance for this is provided locally. During the implementation phase of the Foundation Phase curriculum in 2009, support was provided by a national training programme and training modules. Nowadays guidance is provided on specific Areas of Learning and delivery of the Foundation Phase curriculum is supported by a range of guidance documents and other resources, for instance related to active learning. Alongside the Foundation Phase curriculum, the delivery of the literacy and numeracy elements is tied to a more general approach by a national Literacy and Numeracy Framework that sets out specific outcomes for children on literacy and numeracy from age 3 to 14.

Curriculum integration in Sweden resembles that of Wales (United Kingdom) in that there is also a transition phase from ECEC to primary school. Swedish children can attend non-mandatory ECEC from birth to six. At the age of six children are enrolled in non-mandatory preschool classes that are considered as a preparatory year and bridge between ECEC (pre-primary education) and compulsory primary school (which children enter at the age of seven). The government is currently debating whether to make this preschool class mandatory (SOU, 2015). The recreation centre (after-school care) complements the preschool class and primary education (as wrap-around care) outside formal school hours (for parents who are either working or studying).⁶ ECEC in Sweden is guided by the curriculum Lpfö 98, while the preschool class, recreation centre and primary school all follow curriculum Lgr 11 (for compulsory primary education). The curricula for the preschool class, recreation centre and primary school are therefore not only aligned, but are partially integrated. The preschool year is covered by the first and second chapters of Lgr 11 (the curriculum for primary education), which deal with fundamental values and tasks of the school and overall goals and guidelines. The curricular integration between preschool class and primary school thus familiarises pupils with the knowledge criteria that will be emphasised later in compulsory primary school.

Sources: sources for curricula documents are given in Table 4.A.7; Welsh Government (2017), *Wales Country Background Report on Transitions from ECEC to Primary School*; Welsh Government, Cardiff, www.oecd.org/edu/school/SS5-country-background-report-wales.pdf; Swedish Ministry of Education and Research (2017), *Sweden Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education and Research, Stockholm, www.oecd.org/edu/school/SS5-country-background-report-sweden.pdf.

In Austria, the decentralised regional authority system in charge of ECEC and primary school means that strategies and programmes are mainly designed by the involved schools and kindergartens (ECEC), with the help of school development counselling.⁷ The result is a lack of a shared approach towards communication and collaboration between ECEC and primary school at national level. However, recent changes in curricula emphasise a clear move towards building smoother transitions from ECEC to primary school across the jurisdictions (Box 4.4).

Box 4.3 Case study: Explicit curricular alignment in Slovenia

In Slovenia, children attend kindergarten (ECEC) between 11 months and 6 years of age. Kindergarten is delivered in one setting for the whole age range. Primary education (compulsory basic education, including primary and lower secondary education) caters for children between 6 and 15 years old. Kindergarten and primary education are both considered part of the education system and are under the jurisdiction of the Ministry of Education, Science and Sport.

The ECEC and the primary school curricular frameworks are two separate documents and are not integrated. However, they are aligned, since they were developed during the same curricular reform (1996–1999). In the Framework of Curriculum Reform (1996), it is explicitly stated that education programmes and curricula have to be consistent and aligned vertically and horizontally. The kindergarten curriculum is an open and flexible national document with specified principles, goals and examples of activities (see Table 4.A.7). It contains six activity areas (movement, language, art, society, nature and mathematics) and goals and objectives for each of them. The curriculum stipulates the principle of continuity (vertical connectedness) to primary school, but at the same time clearly emphasises that kindergarten should not become schoolified (see Box 1.2 in Chapter 1). The primary school curriculum on the other hand lays down the syllabi for compulsory and elective subjects. Compulsory subjects in the first year are Slovenian language, mathematics, music art, fine art, sport, and environmental education. Foreign language is an example of an elective subject chosen by up to 92% of the first-grade students.

Sources: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016; Ministry of Education, Science and Sport of the Republic of Slovenia (2017), *Slovenia Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education, Science and Sport, Ljubljana, www.oecd.org/edu/school/SS5-country-background-report-slovenia.pdf; sources for curricula documents are given in Table 4.A.7.

Box 4.4 Case study: Building curricular continuity in Austria in the absence of aligned or integrated curricula

In Austria, children transition from kindergarten (ECEC) to primary school at the age of six. The year prior to starting primary school (a mandatory pre-primary year since 2010) aims at preparing children for lifelong learning. Recently, two actions have been implemented to improve national curricular continuity between ECEC and primary school: 1) the State-wide Framework Curriculum for ECEC (ratified in 2009); and 2) the addition to the Austrian Framework Curriculum for five to six-year-olds (2010). The first describes the educational domains (i.e., emotions and social relationships; ethics and society; aesthetics and creativity; nature and technology; language and communication; motor skills, health, and well-being), but does not state developmental goals or outcomes for children. The second describes exemplary competencies, specific educational demands and learning needs for five and six-year-olds to support children's individual learning processes while transitioning to primary school. The curriculum for primary school focuses on learning competences already acquired in ECEC settings that may be further developed and stimulated in the context of primary school subjects. The connection, however, is not explicitly stated in the curriculum. The curriculum includes compulsory subjects, such as religious education, general studies, German, reading, writing, mathematics, music, arts, textile/technical work, and sports. Regional adaptations of the curriculum are allowed for ECEC, but not for primary education. This may further challenge curricular collaboration at the local level.

Sources: sources for curricula documents are given in Table 4.A.7; Charlotte Bühler Institut (2016), *Austria Country Background Report on Transitions from ECEC to Primary School*, Charlotte Bühler Institut, Vienna, www.oecd.org/edu/school/SS5-country-background-report-austria.pdf.

For some other jurisdictions, despite having no functional integration between curricula (e.g. in Norway), coherence is sought in various national strategies (i.e., on language, reading and writing and on science subjects) aimed at kindergarten (pre-primary education) and primary school collectively. In many jurisdictions, the last year of ECEC has evolved into a specific transition year (pre-primary education) between two systems that operate either under the legislation of primary education or the legislation of ECEC. Nevertheless, the transition year aims to adapt and merge the core elements of both curricula to promote shared practices, common language and a mutual understanding of ECEC and primary school. The ultimate goal of this alignment is to facilitate a smooth transition for children.

To summarise, having a fully integrated curriculum for the last year of ECEC and the first year of primary school is not, in itself, an assurance that the pedagogical transition to school will be smooth. Rather, as the examples presented here illustrate, it requires commitment from both practitioners and policy makers to establish the link between the two systems, either by reformulating the curricula or by providing supplementary strategies at national or local level. Regardless of the level of alignment between curriculum documents, transitions from ECEC to primary school are increasingly receiving attention in jurisdictions, as stated for instance by Norway (Norwegian Directorate for Education and Training, 2017).

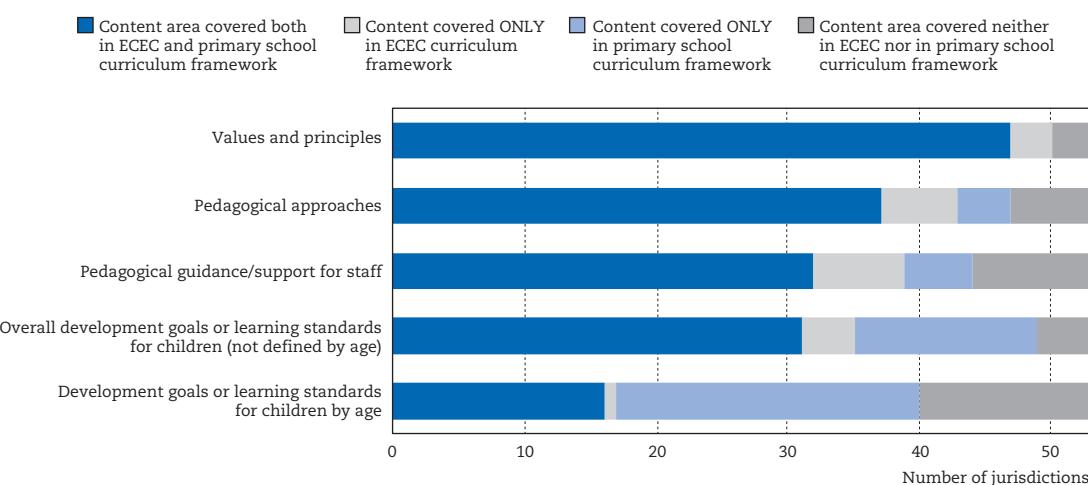
Early childhood education and care and primary curricula generally share values, pedagogical approaches and learning goals

In general, curriculum frameworks for the last year of ECEC and the first year of primary school cover the values and principles (described in the next section) underlying the curriculum content and pedagogical approaches to create an ideological starting point for educational work. In addition, curricula framework may include principles for organising pedagogical guidance for staff. In most cases, curricula framework also address the development goals or learning standards to be achieved by the children. It is more typical to address broader, overall goals in ECEC curricula framework, while primary school curricula frameworks are more likely to address age-specific learning goals or standards.

Figure 4.2 indicates that the overwhelming majority of jurisdictions (47 out of 54 jurisdictions with available data) cover values and principles in both curriculum frameworks (for the last year of ECEC and the first year of primary school). This shows that for the majority of the jurisdictions values are a starting point through which to foster pedagogical continuity. Only three jurisdictions (Greece, Kazakhstan and Portugal) reported having values and principles in their ECEC curricula but not in their primary school curricula (see Table 4.A.2 in Annex 4.A).

Figure 4.2 Values and principles are commonly included in both ECEC and primary curricula (2016)

Values, pedagogical approaches, and learning goals in ECEC and in primary education



Notes: Information on values, pedagogical approaches and learning goals are based on information from 54 countries and jurisdictions. Jurisdictions reported the curricular contents of documents in place during the first year of ECEC and the first year of primary school. Three jurisdictions were excluded from the comparisons: For Canada (Nunavut): Curriculum Foundations does not cover specific areas or topics, but rather is an overarching curriculum document. Elementary Teacher's Planning Guide does not cover specific areas. Canada (Quebec): Accueillir la petite enfance. Le programme éducatif des services de garde du Québec does not cover specific subjects or areas but addresses the global development of a child. New Zealand: Te Whāriki does not prescribe individual subject areas. The curriculum contains a set of interwoven principles, goals and strands that serves as the basis for curriculum implementation.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495625>

Similarly, in more than half of jurisdictions (37 out of 54 jurisdictions), pedagogical approaches are included in both ECEC and primary education curricula. On the other hand, in six jurisdictions pedagogical approaches were cited only in ECEC curricula and in four jurisdictions they were reported only in primary school curricula.

Additionally, in more than half the jurisdictions (32 out of 54), pedagogical guidance/support for staff is covered in both ECEC and primary school curricula. For five jurisdictions these aspects are considered only in primary school curricula and for seven jurisdictions only in ECEC curricula. Putting emphasis on supporting staff members in their practice and daily work facilitates purposeful and goal-oriented work. A key factor in smooth transitions is staff's knowledge of their own work as well as the work of staff members in other settings (Chapter 1). Deliberate pedagogical guidance can thus aid in lowering experienced pedagogical boundaries by aiding pedagogical knowledge and exchange between ECEC and primary education.

Finally, 57% of the participating jurisdictions (31 out of 54) report having overall learning goals in both ECEC and primary education curricula, whereas only one-third (16 out of 54) report having age-specific learning goals or standards in both ECEC and primary school curriculum frameworks. At the same time, it is clearly more typical to address development goals or learning standards for children by age in primary school curriculum framework than in ECEC, which means that in many jurisdictions children are more likely to be working towards age-specific development goals and learning standards when they enter primary school. This also reflects the ideological differences between ECEC and primary school on how children should be prepared for school.

To sum up, the majority of jurisdictions cover values, principles and pedagogical approaches in both ECEC and in primary school curriculum frameworks. Pedagogical guidance/support is mentioned somewhat less frequently in both curriculum frameworks. Overall developmental goals or learning standards are more often mentioned in both ECEC and primary school curriculum frameworks than development goals by age, which are more likely to be covered only in primary school curriculum framework. Below we provide examples of how values, pedagogical approaches, staff guidance and learning goals appear in countries and jurisdictions.

Values and principles vary across jurisdictions

For many jurisdictions, curricula reflect broader societal values and principles and provide a foundation on which pedagogy and practices are constructed. In many cases, values underpin the conceptualisation of learning and development at large. Values can also stem from the societal norms, democratic values, or educational virtues upon which society is based and which support the transition from ECEC to primary school.

For instance, in Austria the principles of individualisation/differentiation and lifeworld orientation are covered in both the *State-wide Framework Curriculum for ECEC Institutions and in the Curriculum for Primary Education* (BMUKK, 2012). They are increasingly marked by a “new culture of learning”, where children are expected to acquire competences in a manner that is appropriate for their age, and teaching is gradually replaced by a notion of mentoring and support. The goal is to guarantee a well-founded, holistic early childhood and school education (Charlotte Bühler Institut, 2015). An aligned approach to education should not only prevail during the last year of kindergarten (pre-primary education), but also throughout the entire time spent in ECEC and primary school. In Finland, human rights alongside respect for the rights of the child are values that permeate the education of age groups zero to six in the ECEC to primary grades curricula (*Curriculum Guidelines on ECEC in Finland*, 2005; *Core Curriculum for Pre-Primary Education*, 2014; *Core Curriculum for Basic Education*, 2014; see Table 4.A.7 for source details).

In Japan, the objective of early childhood education is to build the foundations for the lifelong formation of one's character. The objective of compulsory education is to cultivate foundations for

an independent life within society and to foster the basic qualities necessary for those who will form the state and society. In Japan's Basic Act on Education (2006), early childhood education and compulsory education are both considered part of an education which aspires to ideal forms of individuals and members of society, as well as continuity and coherence in the lifespan. In Sweden, the Education Act (2010) clearly states that the main aim of education in the school system (including preschool class, recreation centres and primary school) is for children to acquire and develop knowledge and values. It aims to promote the development and learning of all children as well as to foster a lifelong lust for learning. Education aims to communicate and entrench respect for human rights and the basic democratic values upon which Swedish society rests.

Some jurisdictions also mention the value of the (pedagogical) learning environment in implementing curricula and directing pedagogical work. In Slovenia, the learning environment is a part of the "hidden" (implicit) curriculum, reflected, for instance, in the ways the educational process is organised in time and space, and how materials for activities are prepared. Thus, pedagogical learning environment refers to the ordinary routine repeated day after day, including rules on time and space (when and where children are doing things); communication between children and adults and among children; and patterns of behaviour, habits, and rituals. Such elements are also present in primary education (often implicitly). The importance of establishing physically and emotionally safe and inspiring environments that support children's active exploring and learning both in ECEC and in primary education are common aspects of the learning environment raised by participating countries countries (e.g. Denmark) that can enhance children's experiences of continuity between two sectors if deliberately and carefully implemented by staff.

Pedagogical approaches vary between and within countries

Pedagogical approaches offer a theoretical understanding of upbringing, teaching and education as well as providing concrete tools which directly influence staff's work. Usually jurisdictions did not report on any specific pedagogical approach (e.g. Montessori or Reggio Emilia pedagogies). Instead, the pedagogical approach in place for ECEC and primary school is generally constructed along the principles derived from several pedagogical traditions.

For example, in Slovenia the Kindergarten Curriculum (covering pre-primary education) is based on the developmental-process approach, which takes into account the child's individual traits and development, instead of emphasising achievement of prescribed outcomes. The approach is based on scientific findings about early child development and the importance of early learning and language, as well as critical periods in development, such as the social developmental theories of Bruner (1960), and Vygotsky's social constructivism (Vygotsky, 1978). The Basic School Programme (for primary education) is also built on these developmental theories, and stresses the importance of the child's active participation in the co-construction of knowledge with more knowledgeable others, and the importance of the developmental-process approach.

The Nordic countries share a long history of social-pedagogical approaches, especially in ECEC, but traces of a similar pedagogical approach are also acknowledged in primary education. In Denmark, there is no explicit pedagogical approach within the legislation on ECEC, but many local facilities work under the guidelines of a variety of pedagogical traditions, including Steiner, Montessori, Marte Meo, Reggio Emilia, etc. ECEC provision in Denmark goes back 100 years. The main influences are from the Nordic tradition of a growth-oriented pedagogical approach, as well as a strong orientation towards the Vygotskian socio-constructivistic theories. In the public Folkeskole (primary school), the pedagogical personnel are responsible for choosing the pedagogical approach as long it ensures that the national (common objectives) and local goals are met. Private schools are freer in their choices of pedagogical approach and they are often defined by an explicit commitment to certain values and pedagogical approaches. The Norwegian kindergarten (ECEC) also places itself within the Nordic social-pedagogical tradition, which sees the child as an active participant in the learning processes,

with influences from Fröbel pedagogy. The holistic approach is reflected in the Kindergarten Act's purpose clause, which reflects the view that developing pupils' knowledge, skills and attitudes is of great importance to their ability to master their own lives and participate successfully in work and social life. The Quality Framework for primary/secondary schools (see Table 4.A.7 for sources) also emphasises the role of the pupil as an active participant in the learning process. Stimulating children's curiosity and desire to learn is important from the start, and is reflected in the purpose clauses for both ECEC and schools.

Countries vary in how they address learning and developmental goals during transition

For most jurisdictions, learning goals in ECEC are more likely to depend on children's individual development and be defined by broader objectives for learning and development. Staff members have pedagogical freedom to alter their practices and methods within these broad goals and according to individual children's needs. More systematic and regulated development and learning goals by age (often also officially regulated) tend to be in place in primary education and are often linked to school subjects, indicating that children are assessed against more specific learning goals in school rather than in ECEC.

For example, Denmark's pedagogical curriculum (*Pædagogiske læreplaner*) for ECEC lists six objectives for the development of the child: comprehensive personal development; social competencies; language development; body and motion; nature and natural phenomena; cultural values and artistic expressions. The ECEC settings themselves decide through which learning and development goals, methods and activities they will accomplish these objectives. The transition to kindergarten class (pre-primary education) at the age of six means a change in the learning goals for children. In kindergarten class, "Common Objectives" set goals and expected standard outcomes for children's development and learning within each of the six objective themes (i.e., language development; mathematical attention; science; creative forms of expression; body and motion; engagement and community). In primary school, the "Common Objectives" stipulate national goals for what the pupils are expected to learn in each of the school's subjects. These are binding goals and must be used to direct instructional activities in primary and lower secondary schools. In the Danish case, children gradually become acquainted with learning goals during transition. Staff use the goals to understand the development of the individual child.

In some jurisdictions children's learning and development goals are addressed (and monitored) systematically from ECEC and all the way through the primary grades. From this perspective, having systematic, structured and consistently checked learning goals is useful for identifying children's individual needs and ensuring consistency in delivering the key contents of the curriculum across age groups.

For example, in Japan, the kindergarten director (ECEC head) is obliged under law to prepare an extract of each child's Cumulative Guidance Record for Kindergartens and to send it to the principal of the primary school. This is an official record of each child's enrolment and represents the main document for the subsequent guidance of the child. The record is treated in the same way in nursery centres and centres for early childhood education and care as in kindergarten. No age-specific learning goals are applied to children in ECEC or primary school; instead the system uses overall learning goals and relies on passing on systematic information on children's attendance, learning and development from ECEC to primary education.

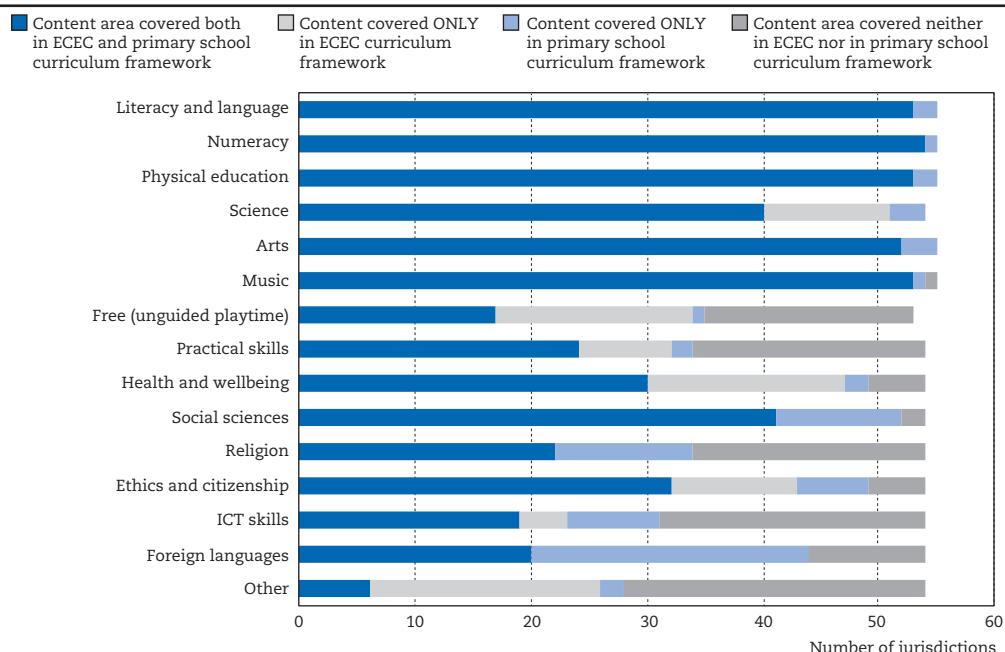
In Wales, individual children's learning continuation is guaranteed by the use of the Foundation Phase Profile. The Foundation Phase Profile is a nationally consistent tool that aligns with the end of Foundation Phase Outcomes and supports the assessment of children's learning and development throughout their time in the Foundation Phase (for three to seven-year-olds). The profile is suitable for use from age three and is being widely used on a voluntary basis for children before they enter

primary school. The use of the profile was introduced on a statutory basis in September 2015, and the intention is to make it a universal approach. The profile supports practitioners in providing a developmentally appropriate holistic curriculum for all children and encourages continuation between ECEC and primary education.

Core content areas are generally aligned between early childhood education and care and primary education

Provision of similar curriculum contents (subject areas) during the last year of ECEC and the first year of primary school is one way of paving pedagogical continuity between the two systems. ECEC and primary school curriculum frameworks often both cover literacy and language; numeracy; physical education; arts; music; social sciences; and science. There is greater discrepancy between ECEC and primary curriculum frameworks for free (unguided) playtime; practical skills; health and well-being; religion; ICT skills and foreign languages (Figure 4.3; see also Table 4.A.2). Some of these subjects are mostly only covered in ECEC (free playtime, practical skills, health and well-being, and ethics and citizenship). Skills such as learning to work in a group and to become a member of society (getting along with other children and adults), as well as the care aspects (health and well-being) are also more likely to be emphasised in ECEC than in primary education (Bennet, 2004).

Figure 4.3 The main core content areas are aligned in both ECEC and primary schools in most jurisdictions (2016)



Note: Information on values, pedagogical approaches, and learning goals are based on responses from 54 countries and jurisdictions. Jurisdictions reported the curricular contents in documents in place during the first year of ECEC and the first year of primary school. For jurisdictions where only one curriculum exists for ECEC and primary education, content was counted as "content area covered both in ECEC and primary school curriculum framework".

"Other" includes individual contents named by the jurisdictions that fell outside the predetermined contents, e.g. social skills and media, media and external activities, and safety.

Three jurisdictions were excluded from the comparisons:

- Canada (Nunavut): *Curriculum Foundations* does not cover specific areas or topics, but rather is an overarching curriculum document. *The Elementary Teacher's Planning Guide* does not cover specific areas.
- Canada (Quebec): *Accueillir la petite enfance. Le programme éducatif des services de garde du Québec* does not cover specific subjects or areas but addresses the global development of a child.
- New Zealand: *Te Whāriki* does not prescribe individual subject areas. The curriculum contains a set of interwoven principles, goals and strands that serve as the basis for curriculum implementation.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495635>

On the other hand, religion, ICT skills and foreign languages are more typically implemented exclusively in primary school curriculum frameworks (Figure 4.3). Themes of religion taught later in school may at least partly build on and evolve from the themes of ethics and citizenship introduced in ECEC, as ethical considerations are largely present in the foundations of many religions. Higher expenditure on primary education versus pre-primary (see Chapter 2 of this report) may explain the higher emphasis on ICT skills in primary education, because primary schools are better equipped with technological devices. Furthermore, the digitalisation of society and introduction of ICT is only recently emerging in ECEC (Mustola et al., 2016) and therefore not yet likely to be included extensively in ECEC curricula. When it comes to foreign languages, many jurisdictions prioritise foreign language teaching in primary education, favouring mother tongue learning in early years. Furthermore, the provision of foreign languages in ECEC may also depend on the characteristics of each jurisdiction (e.g. whether there is an established immigrant population).

There are examples of both continuity and discontinuity in curricular content

Literacy and language skills have a particularly explicit role and place in the transition guidelines in written curricula across jurisdictions, possibly due to the well-documented importance of literacy skills for children's later language development and school performance (UNESCO, 2007) and the pivotal role of language in human development in general. For example, in Sweden, great weight is given to language learning in both the curriculum for preschool (Lpfö 98) and in the curriculum for compulsory school, preschool class and recreation centres (Lgr 11); thus, across the transition from ECEC to primary education. Lpfö 98 states the following as one task of ECEC (preschool): "The preschool should put great emphasis on stimulating each child's language development, and encourage and take advantage of the child's curiosity and interest in the written language. Children with a foreign background who develop their mother tongue create better opportunities for learning Swedish, and developing their knowledge in other areas. The Education Act (2010) stipulates that the preschool should help to ensure that children with a mother tongue other than Swedish, receive the opportunity to develop both their Swedish language and their mother tongue". An equivalent section is to be found in Lgr 11 (Fundamental values and tasks of the school): "Language, learning, and the development of a personal identity are all closely related. By providing a wealth of opportunities for discussion, reading and writing, all pupils should be able to develop their ability to communicate and thus enhance confidence in their own language abilities." Consequently, literacy and language should be included throughout children's education.

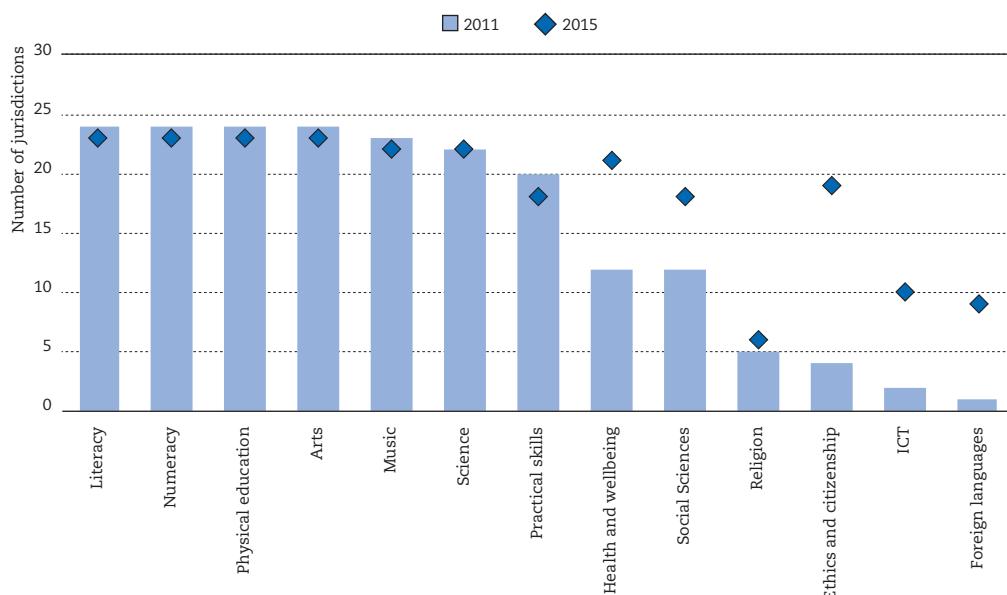
At the jurisdiction level, discrepancies between the content of ECEC and primary school curricula can take a number of forms. For example, in Japan there is a clear pattern of citing the majority of contents (subject areas) in primary school curriculum. Free (unguided) play time is the only content cited in both ECEC and primary school curriculum frameworks. These findings are closely linked to the nature of the Japanese curriculum, which emphasises a smooth transition from a "period of awakening learning" in early childhood to a "period of self-conscious learning" in later childhood. Similar patterns emerge in the Danish education system, where ECEC is constructed around broader themes while primary education introduces subject areas. Of the Nordic countries, Finland and Sweden curricular content is more aligned between the last year of ECEC and the first year of primary education than in Norway and Denmark. In all the German Länder alignment is rather limited between the last year of ECEC and the first year of primary education for individual curriculum contents. The Canadian provinces are much more aligned, possibly due to the established role of kindergarten (pre-primary year) across the provinces.

Pre-primary curricula are broadening their content areas

What are the emerging trends in curricula and pedagogical thinking during the last year of ECEC? Comparing the content areas of curricula frameworks between 2011 and 2015 suggests that

Jurisdictions have broader curriculum frameworks in place in pre-primary education (Figure 4.4). While most jurisdictions continue to place equally high importance on literacy, numeracy, physical education, science, arts, music and practical skills, an increasing number of jurisdictions have added health and well-being, social sciences, ethics and citizenship, ICT skills, and foreign languages. This indicates they are striving towards more comprehensive curricular frameworks.

Figure 4.4 Jurisdictions are broadening their pre-primary curricula to include emerging learning areas (2011 and 2015)



Notes: Information on content areas of the curriculum is drawn from 24 countries and jurisdictions that responded to a survey in both 2011 and 2015. Learning areas are ranked in descending order for the number of jurisdictions declaring that the learning areas were included in their ECEC curriculum framework in 2011. Respondents could list more than one content category.

- Belgium (Flemish Community): data for 2015 reflect the contents stated in the Developmental Objectives for 2.5 to 6-year-olds.
- Luxembourg: data for 2015 consist of the curriculum contents in two parallel curricula in place (*Bildungsrahmenplan für non-formale Bildung im Kindes und Jugendalter [0-12] und Plan d'Etudes de l'enseignement fondamental*).
- New Zealand: for 2015, curricula for the last year of ECEC are considered (*The New Zealand Curriculum* and *Te Marautanga o Aotearoa*).
- Poland: In 2015 foreign languages were obligatory only for 5-year-old children. Starting from September 2017, foreign languages are obligatory for children from 3 years old.
- Portugal: In 2015 kindergartens can provide foreign language (last year of ECEC).
- Slovenia: In 2015 settings can organise foreign languages. Data by jurisdiction can be found in Table 4.A.2.

Source: OECD Network on ECEC "Survey for the Quality Toolbox and ECEC Portal", June 2011 and 2015.

StatLink <http://dx.doi.org/10.1787/888933495642>

The fact that a clear majority of jurisdictions continue to place the highest curricular emphasis on literacy, numeracy, physical education, science, arts, music and practical skills in their curriculum framework for pre-primary education is reassuring. It suggests that the last year of ECEC is still viewed as facilitating children's learning and development by emphasising both children's practical basic skills and more traditional learning contents through principles of play-based learning. Play forms the basis of early learning in countries and this is integrated in all topics of ECEC – in some countries this is more structured than in others. In addition, countries often have some free playtime for children too, during which they can decide what sort of play they wish to do (e.g. playing outside, drawing, playdough, etc.). Thus, despite concerns about schoolifying pre-primary education (e.g. Bassok, Latham and Rorem, 2016), the role of play and basic skills has persisted strongly in these jurisdictions' curriculum frameworks.

The emerging trend on curriculum frameworks is towards including health and well-being, social sciences, ethics and citizenship, ICT skills, and foreign languages. These were more often cited in curriculum frameworks in 2015 than four years earlier, therefore solidifying their status

in the curriculum. Religion was the least often cited curriculum content in 2015, but there was no change from 2011. Between 2011 and 2015 there was a particularly large increase in jurisdictions adding ethics and citizenships, ICT skills, and foreign languages to their pre-primary curricula. The increase for ethics and citizenship was particularly notable, from 4 jurisdictions (out of 24) in 2011 to 19 (out of 24) in 2015. This might be explained by the change in societies over the last couple of years, marked by increased immigration and diversity. The increase in foreign language provision may be related to the same phenomenon. Ethics and citizenship skills are also needed as children grow as part of their immediate surroundings and societies and as they approach the transition to primary school.

ICT skills were more frequently cited in curriculum frameworks in 2015 than in 2011, with 10 jurisdictions (out of 24) citing them as a content area in 2015 compared to 2 in 2011. The fast development of ICT indicates that the value of introducing children to these technologies in ECEC is being acknowledged by jurisdictions. ICT is thus seen as relevant even for younger children – both as a teaching tool in itself and for children to develop their own agency in using it (Mustola et al., 2016).

Finally, the number of jurisdictions citing health and well-being in their pre-primary curriculum framework documents has nearly doubled, from 12 to 21, indicating a growing awareness of the impact of healthy lifestyles, nutrition, physical activity as well as broader well-being on children's overall growth and development.

The gap between children's hours of attendance in early childhood education and care and primary varies across jurisdictions

The length of the day (average hours of attendance) in ECEC and in primary education, as well as staff-child ratio and group size, all affect how well staff can implement pedagogies (i.e. organise instruction), and how much individual attention a practitioner can give each child (e.g. Hattie, 2009; Pianta, 2004). Discrepancies in these factors between ECEC and primary education can significantly influence children's daily experiences of pedagogical delivery during transition.

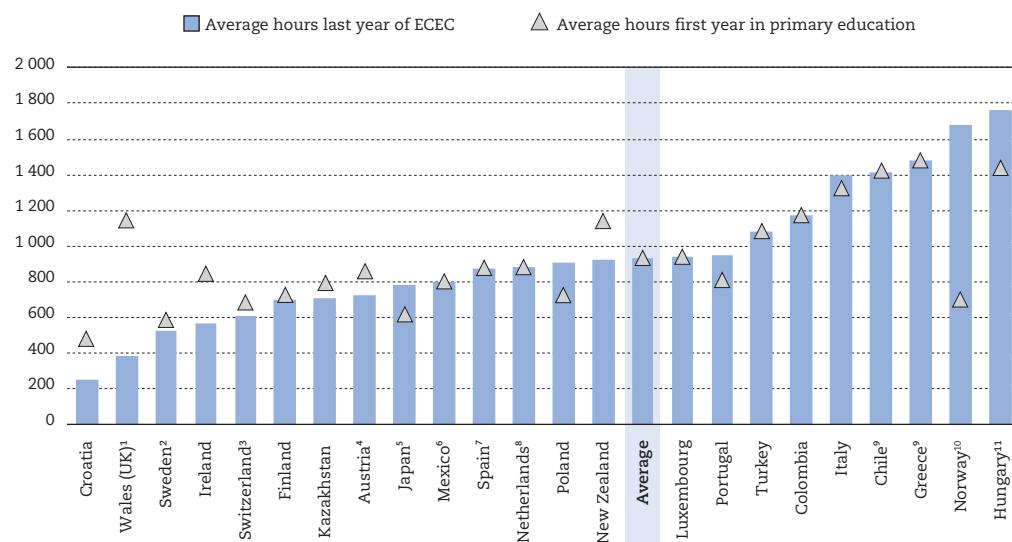
In one-fifth of jurisdictions, children spend longer hours in early childhood education and care than in primary school

Pedagogical continuity during transitioning can be helped by having similar daily structures and day lengths in ECEC and in primary education. Figure 4.5 compares the average hours per year children spend in the last year of ECEC and the first year of primary school (see also Table 4.A.3 in Annex 4.A.). For around half of the jurisdictions (13 jurisdictions out of 23), hours of instruction are fairly similar for the last year of ECEC and the first year of primary schooling, reflecting national regulations on length and structure of the day in the two educational systems. For example, in Finland the amount of free-of-charge pre-primary education (last year of ECEC) is equivalent to the amount of primary education, even though for several children the length of the day in ECEC in practice is longer due to additional after-school care.

In 26% of jurisdictions (6 out of 23), children spend more hours on average in the setting during the last year of ECEC than in the first year of primary education. This pattern is observed in Italy, Hungary, Norway, Japan, Portugal and Poland. The difference in hours is particularly pronounced in Norway. For some jurisdictions, this is related to the structure of the day in ECEC, which often covers the full day programme. For example, in Norway children usually attend full-day programmes of integrated care and education to match parental working hours (children spend 35 hours per week on average for 48 weeks per year). In comparison, the length of the school day is relatively short (children spend 18.4 hours per week in the first year of primary school for 38 weeks per year); however, most children attend out-of-school provision in the first years of schooling.

Figure 4.5 In half the jurisdictions the hours spent in early childhood education and care and primary education are similar (2016)

Average annual hours of participation in last year of ECEC and first year of primary education



Notes: Information on content areas of the curriculum is based on responses by 23 countries and jurisdictions. Jurisdictions are sorted by ascending order for the average number of hours of participation in the last year of ECEC.

Calculations are based on answers in Q3 of the survey on transition between ECEC and primary education. They are calculated as follows: number of hours per week as indicated by the jurisdiction X number of weeks per year as indicated by the jurisdiction. If hours per week were provided as 22-24 hours for instance, the average of this number was used, i.e. 23 hours.

1. Data for Wales for ECEC refer to the minimum hours of ECEC calculated as a minimum of 10 hours per week for 38 weeks per year.

2. Data for Sweden refer to the minimum hours that should be provided per year, stated in the steering documents. However, the vast majority of pupils in preschool class continue on to an out-of-school centre. The activities in out-of-school centres are also guided by a curriculum.

3. Data for Switzerland, the hours per week of last year in ECEC and first year in primary education vary by Canton.

4. In Austria, regulations define that children have to attend at least 4 days a week: 16-20 hours in total (Some provinces deviate from that by demanding 5 days a week). Parents can decide to have their children attend more hours as well.

5. Data for Japan for last year of ECEC are based on children participating in integrated centres for ECEC, in the education only part (which is on average 20 hours per week for 39 weeks).

6. Data for Mexico for ECEC: year of reference is 2016/17.

7. Data for Spain refer to minimum hours per week based on a minimum of 5 hours per day.

8. Data for the Netherlands are based on 3 520 hours for the first four grades in primary school.

9. Data for Chile and Greece are based on full-time participation.

10. Data for Norway for ECEC are based on the reported average hours per week by parents (as given in a 2010 survey), and the average numbers of weeks per year parents pay for.

11. Data for Hungary are based on the compulsory minimum hours per week and the regular opening weeks per year.

Data by country can be found in Annex 4.A.3

Source: Data for Canada for primary education come from, OECD (2016), *Education at a Glance 2016: OECD Indicators*, <http://dx.doi.org/10.1787/eag-2016-en>; Education at a Glance 2016. OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/88893349562>

In 39% of jurisdictions (9 out of 23), the opposite pattern is observed. That is, children spend more hours in the first year of primary school than during the final year of ECEC. This pattern is evident in Austria, Croatia, Finland, Ireland, Kazakhstan, New Zealand, Sweden, Switzerland, and Wales (United Kingdom). For Finland and Sweden, however, the difference in annual attendance is only marginal (i.e., 22 hours and 56 hours respectively). The difference in hours is marked in Wales, where ECEC is not mandatory and parents may send their child for the educational element of the day only (2.5 hours) or for the full day (with the rest of the day considered as wrap-around care). On the other hand, the hours children spend in primary education are more fixed.

For the rest of the jurisdictions with available data (8 out of 23) the number of annual hours spent in ECEC and in primary education are the same.

How do jurisdictions organise the daily activities during the last year of ECEC and the first year in primary education?

In Slovenia the typical daily routine in a kindergarten (pre-primary education) is very similar for all age groups, including the transition year. Children arrive before breakfast at 8.30, after which structured activities begin in accordance with the programme, intertwined with free play indoors or outdoors. Children have lunch around noon, followed by rest-time and an afternoon snack. Parents pick the majority of children up around 3 pm, but can be as late as 5.30 pm. In basic school (primary and lower secondary education), lessons normally start around 8 am. Free-of-charge morning care is provided for children in the first grade before classes (69% of the children attend). Depending on a school and a teacher, the timetable in the first year can follow structured lessons of 45 minutes with 5-minute breaks or the lessons/breaks are more flexible. Classes end around 11.30. They are followed by lunch and after-school classes which are available until around 5 pm. 93% of pupils in the first year attend the after-school classes (pupils do their homework, learn, take part in various activities, have a snack) which are not compulsory, but free of charge. The main difference between kindergarten and basic school is that the regular day in school is more structured than a kindergarten day. The primary school day is divided into a compulsory part (8 am to 11.30 am) and two non-compulsory parts (before and after the compulsory part).

In Finland, there are no big differences in the duration of the day in pre-primary education and the first year of school. Pre-primary education is provided free of charge for around four hours a day; however, most children (about 70%) attending pre-primary education also use ECEC services before and after pre-primary education. Primary education is similar, with children attending morning- and afternoon groups, organised outside official school hours (3-5 hours/day), meaning they have similar hours of attendance. The biggest difference between ECEC and primary school is that in primary school, the teaching is divided into subjects and only one teacher per class, whereas in ECEC teaching is not subject-based, but more holistic and based on team work. The ECEC also represents play and child-directed activities, such as being able to move freely and choose more freely what to do, whereas primary school represents more structured, adult-directed engagement and learning.

In Austria, a regular day in kindergarten (pre-primary education) primarily consists of play, exploration, and project time. Primary school takes up play and other forms of learning suitable for children. Gradually activities become more oriented towards achievement. At primary school a regular day is commonly more structured by subjects (where time is concerned). The laws regulating time at school also determine the structure of the school day more rigidly. While children in primary school have to be at school at a certain time, children in kindergarten have more flexibility on arrival time. Children in primary school have to sit still and be attentive for longer periods of time than children in kindergarten.

Most children have to cope with larger class sizes and less adult support when moving to primary school

Across jurisdictions, regulations governing child-staff ratios and the maximum number of children in a group vary, suggesting that children experience different group compositions in ECEC and primary school, and consequently different pedagogical experiences (e.g. large groups and less staff means more emphasis on child independence and more time spent in whole group instruction).

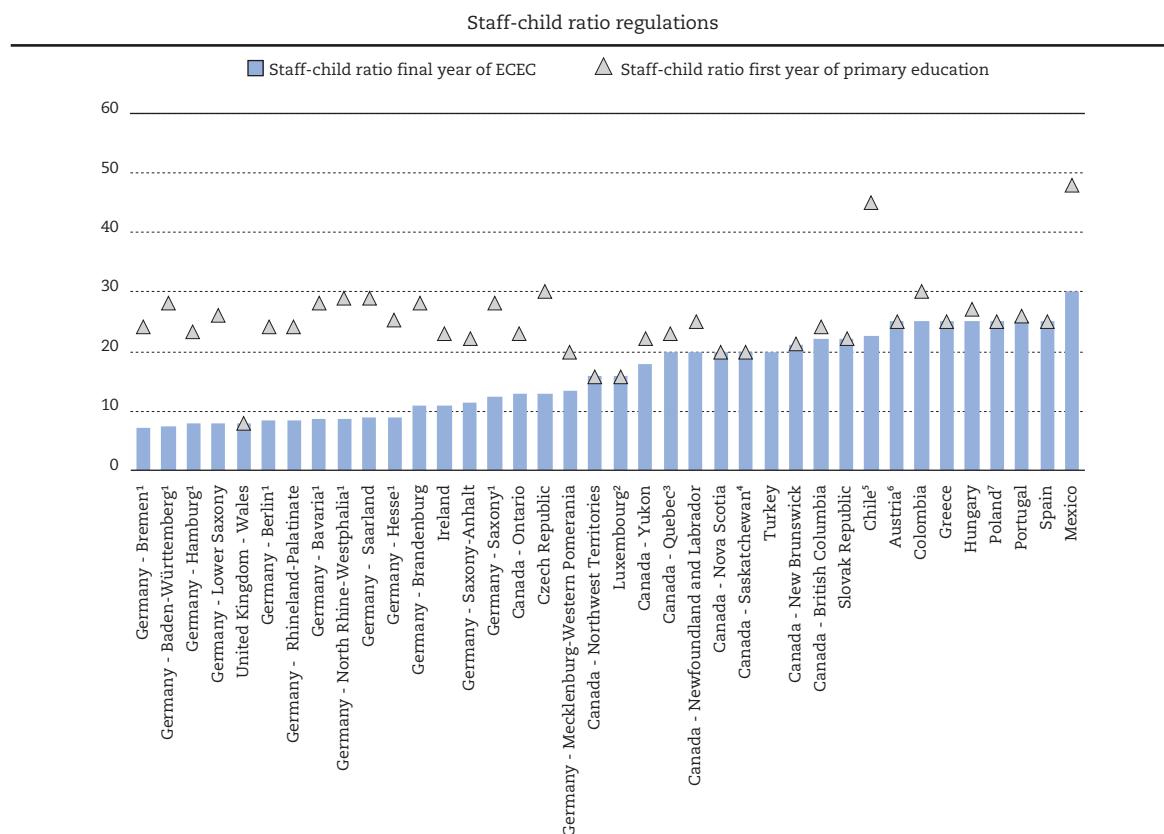
Staff-child ratio

In 69% of participating jurisdictions (27 out of 39 jurisdictions), it is more common for children to experience less favourable staff-child ratios during the first year of primary school than during the final year of ECEC (Figure 4.6 and Table 4.A.4). In many cases this reflects the different nature of ECEC pedagogy and teaching in primary education. ECEC groups often operate along team work lines, while primary classrooms mostly cater for more children per adult, though sometimes with

an auxiliary staff member present. In terms of pedagogy during transitions, this can mean that the amount of time staff devote to individual children can decrease as children move to primary education. At the same time, this change may encourage children to become more self-directed and autonomous, relying on staff support to a lesser extent (Pianta, 2004)

Figure 4.6 compares the regulated staff-child ratio⁸ in the final year of ECEC (ISCED 02) and the first year of primary school (ISCED 1) (see also Table 4.A.4). Note that both the figure and Table only include the last year of ECEC; as some jurisdictions consider the last year of ECEC to be a pre-primary year, staff-child ratios may be more similar to the ratio in primary schools than the earlier years of ECEC.

Figure 4.6 In most jurisdictions, primary school staff-child ratios are higher than in early childhood education and care (2016)



Notes: Information on staff-child ratio regulations is based on responses by 38 countries and jurisdictions. Jurisdictions are displayed in ascending order for the regulated staff-child ratio in the last year of ECEC.

Data refer to the maximum number of children for each member of staff working directly with children (thus, excluding auxiliary staff, managers and other staff in ECEC and primary school settings who do not work directly with children in the playroom or classroom) during the last year of ECEC and the first year of primary education. Only jurisdictions where one single number (maximum) was provided for a certain group, are included. Only jurisdictions with data for both levels are included in the figure. Jurisdictions without regulations for staff-child ratio either in ECEC or in primary education or both are excluded, e.g. in the Netherlands staff-child ratio is regulated until age 3 but not further; hence, the information is not included.

1. Data for primary education for Baden-Württemberg, Bavaria, Berlin, Brandenburg, Bremen, Hamburg, Hesse, North Rhine-Westphalia and Saxony (Germany) refer to the maximum number of children per educator possible.

2. Data for Luxembourg refer to the average ratio, since the law states an average number of pupils per class.

3. Data for Canada (Saskatchewan) for primary education refer to the maximum number of children per educator possible.

4. Data for Canada (Quebec) refer to the last year of ECEC in pre-primary education for 5-year-olds (school setting) with a staff-child ratio of 20:1. Children can also attend the last year of ECEC in an educational setting. The ratios are different in each case. In the ECEC setting the ratio is 10:1 for the age group of 4-5 year-olds.

5. Data for Chile for the last year of ECEC is based on a maximum group size of 22.5 children. Data for the last year in ECEC in Germany refer to empirical data.

6. Data for Austria are the average ratio across 9 states. Staff-child-ratios in the final year of ECEC refer to specialised staff only and vary considerably across states, depending on the local institutional structures and the age range in the groups. There are no data available for the final year of ECEC only.

7. Data for Poland on ECEC refer to regular classes. In integrated classes, there are between 15 and 20 children depending on the number of staff. Data by country can be found in Annex 4.A. Table 4.A.4.

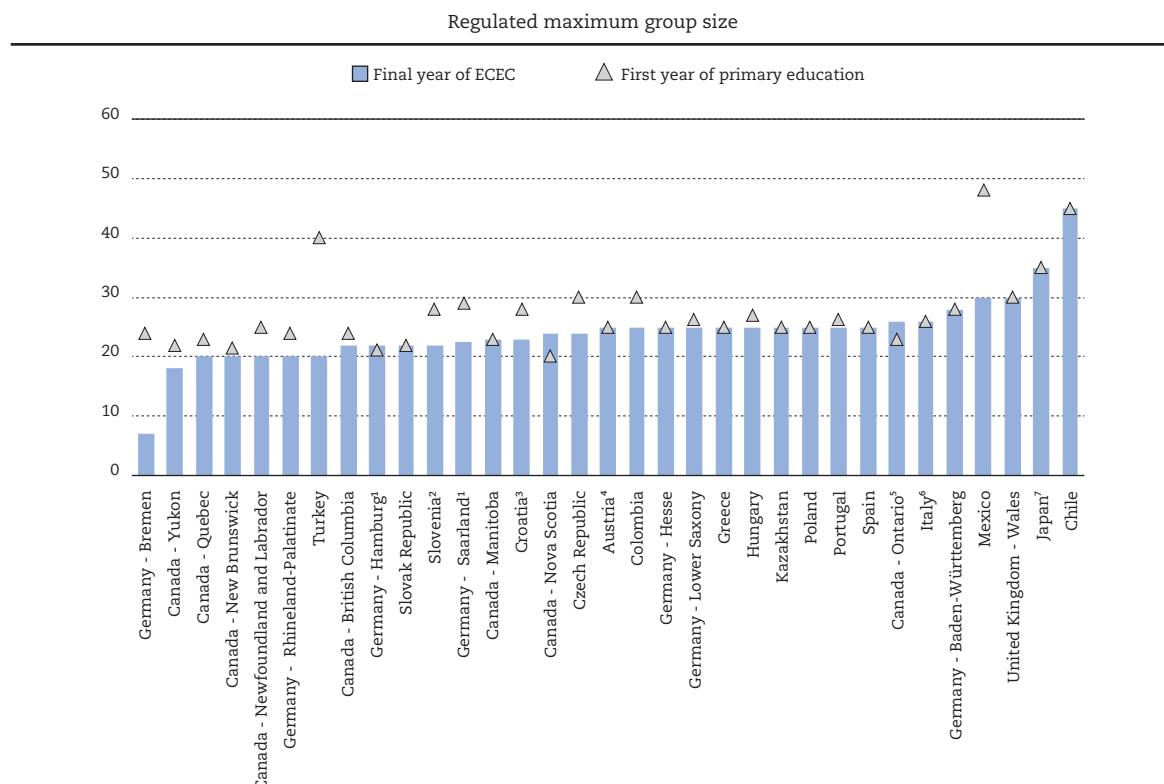
Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/88893349567>

Maximum group size

In 56% of the jurisdictions reviewed (19 out of 34), the organisation of the last year of ECEC and the first year of primary school ensures relatively similar environments in terms of group size (varying by no more than two children), thus ensuring continuity across transitions (Figure 4.7; and see Table 4.A.5).

Figure 4.7 Group sizes in primary school and the last year of early childhood education and care vary little in most jurisdictions studied (2016)



Notes: Information on maximum group size regulations is based on responses from 34 countries and jurisdictions. Jurisdictions are sorted in ascending order for the maximum regulated group size in the last year of ECEC. Data refer to the maximum number of children within one room. Only jurisdictions where one single number (maximum) was provided for a certain group are included. Only jurisdictions with data for both indicators are included in the figure. Jurisdictions without regulations for staff-child ratios are excluded.

1. Data for primary education for Hamburg (Germany) refer to the mean of group size variation 19-23. Data for last year in ECEC for Saarland (Germany) refers to the mean of group size variation 20-25.

2. Data for Slovenia, in ECEC: 22 children, but municipalities can raise the maximum number of children per group by two children (considering the situation in the local community). The maximum number of children per group applies to homogenous age groups (i.e. age range of one year). If the age range of children in a group varies the maximum number of children is 19 (+2). In groups with children aged 1-6 the maximum number of children is 17 (+2).

3. Data for Croatia refer to regular, full-time preschool education programme classrooms.

4. Data for Austria are the average maximum group size across 9 states for ECEC; data for primary school refer to a guideline, which in practice can be exceeded. Data vary considerably across the federal states, depending on the local institutional structures and the age range in the groups. There are no data available for the final year of ECEC only.

5. Data for Canada (Ontario) are based on a maximum group size of 26 children with two staff, a primary school teacher and an early childhood educator.

6. Data for Italy refer to the preschool classrooms of new formation, without children with special needs.

7. Data for Japan refer to Centres for Early Childhood Education and Care and Kindergartens.

Data by country can be found in Annex 4.A. Table 4.A.5.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495675>

While the maximum group size is officially regulated for the jurisdictions covered above, in certain jurisdictions the regulations allow the maximum size to be exceeded under specific circumstances. For example, in the Czech Republic the group size in ECEC can be increased from 24 to 28 children in exceptional cases, and in Greece it can be increased by 10% (from 25) if necessary. In

some jurisdictions (e.g. Italy and Portugal), regulations also include clauses to allow the maximum group size to be reduced if children with special needs are part of the group, or if the group is of mixed ages (e.g. in Slovenia).

Large differences between reported maximum group sizes in ECEC and in primary school are observed in only a few jurisdictions (Figure 4.7). For instance in Mexico the group size increases from 30 children in the last year of ECEC to 48 in the first year of primary; in Turkey the group size can double – from 20 to 40 children – indicating a substantial change for these children. The impact, however, depends on the combination of group size and child-staff ratio, as these two factors can co-contribute to rather different experiences in groups. For instance, in Turkey and Mexico – in addition to the big jump in group sizes – child-staff ratios are also less beneficial (Figure 4.6). The situation is somewhat different for Chile though. While the staff-child ratio is significantly higher in primary schools than in ECEC (22.5 children for every adult in kindergarten (last year of ECEC) versus 45 children for every adult in primary education), children in Chile are already used to being in large groups in ECEC, so the change to primary is less drastic than for children in Mexico or Turkey.

To sum up, in general, children spend relatively similar hours in ECEC and primary education, but have to cope with somewhat less favourable staff-child ratios in primary school. Nevertheless, this is less disturbing when their group sizes remain similar across the two settings, which is the case for all but a few jurisdictions. These structural changes in part explain the pedagogical changes, involving a shift from the team-oriented and holistic approach in ECEC towards an individual teacher and subject-oriented approach in primary education.

What are the common pedagogical continuity challenges and how are they overcome?

While the topic of transitions is gaining attention, and progress has been made towards pedagogical continuity, challenges remain. Learning from the experiences of countries that have tackled issues in designing and implementing transition policies can be instructive and provide inspiration to others. This section explores some common challenges facing countries in their attempts to ensure pedagogical continuity between the last year of ECEC and primary school, and outlines the strategies that various countries have used to overcome them (summarised in Table 4.2).

Table 4.2 Challenges and strategies in strengthening pedagogical continuity

Challenges	Strategies
• Differences and inconsistencies in curricula	<ul style="list-style-type: none"> Develop an integrated curriculum framework and national guidelines Invest in local knowledge and innovations
• Lack of shared pedagogical understanding between the two systems	<ul style="list-style-type: none"> Reform curricula to ensure greater pedagogical continuity Provide opportunities for staff collaboration Emphasise the role of primary school in receiving children
• Inconsistent delivery of pedagogy during transition	<ul style="list-style-type: none"> Ensure consistency in structures Create collaborative learning strategies

Challenge 1: Differences and inconsistencies in curricula

Even though a clear majority of jurisdictions (78%) have either aligned or integrated curricula for the last year of ECEC and the first year of primary education (Figure 4.1), jurisdictions nevertheless reported three challenges related to differences between ECEC and primary school curriculum frameworks:

- Inconsistent attention to transitions across curricular documents. For example, in Norway, the *Framework Plan for the Content and Tasks of Kindergartens* describes transition from

kindergarten to school, but transition is only mentioned in passing in the regulation to the Education Act (for primary school).

- 2) Differing emphases on goals and focus of education (and care) in curricular documents for ECEC and in primary education. This makes it difficult for staff members to understand the distinctive features of each other's practices and provide pedagogical support for children during transition. For instance, in Slovenia, despite sharing the same principles and framework, the focus in kindergarten (ECEC) is on the process of achieving the results and goals, whereas in basic school it is more about achievement, outcomes, results and knowledge standards.
- 3) Decentralised distribution of responsibility over ECEC and primary education leads to different pedagogical concepts and diverging curricula, resulting in unaligned pedagogical approaches, as in Austria and Finland. In the latter, for example, local freedom in curriculum implementation requires greater co-operation among the experts representing the different professional fields, and better pedagogical collaboration between pre-primary and primary education.

Strategy: Develop an integrated national curriculum framework and national guidelines

Austria introduced the National Framework Curriculum in 2009 in order to integrate recent pedagogical developments in ECEC and in primary education. The reform of primary school (passed into law in June 2016) should help overcome the continuity challenges raised by the decentralised responsibility over ECEC and primary education.

In Slovenia, both preschool and primary school teachers are actively involved in curricular development. Teachers from both sectors collaborate with the National Educational Institute as well as the National Council of Experts for General Education, which adopts and confirms the curricula. This is an innovative and participatory example of national curricular work to bring kindergartens (ECEC), schools and educational institutions together to narrow the pedagogical gap between ECEC and primary education. The challenges are considerable, given that the last year of ECEC and primary education are covered by separate curriculum documents.

Finally, in Ireland a recent literature review (O’Kane, 2016) and international audit (O’Kane and Murphy, 2016a; 2016b) commissioned by the National Council for Curriculum and Assessment (NCCA) identified international best practices. These are currently being incorporated into a national transition initiative and will form part of the most recent policy development to support a pedagogical continuum for young children from ECEC to primary school.

Strategy: Invest in local knowledge and innovations

In jurisdictions with large local autonomy, challenges in achieving curricular continuity can be overcome by investing in local implementation of the national curriculum. In Japan, local governments nationwide are proceeding with efforts to formulate two unique transition period curricula aimed at a seamless transition from early childhood education to primary education. For ECEC, this is called the “approach curriculum”, and states that early childhood education leads to learning within the early childhood education stage and beyond by building a foundation for lifelong learning. For primary education, the transition period curriculum is called the “starting curriculum”, and states that children entering primary school actively demonstrate their abilities and create a new school life, based on learning and development through play at kindergartens, nursery centres and ECEC centres. Alongside the national initiatives by local governments, individual communities, schools and facilities in Japan have also implemented a wide variety of initiatives for facilitating transitions. They can do so with the support of local government. For example, teachers endeavouring to implement a transition period curriculum can draw on a collection of practical case studies prepared by the local government.

In **Sweden**, where governance of the education system is also highly decentralised, the government implemented changes to both national curriculum Lpfö 98 and Lgr 11 in July 2016 to safeguard the transition to primary school. These changes entail two new chapters in Lgr 11, one for the preschool class and one for the recreation centre, making clear the purpose and the core content of the teaching in the respective activities. Also, the section on transition and co-operation was revised in both Lgr 11 and Lpfö 98 to emphasise the importance of sharing knowledge, experiences and information on the education between the different school forms and the recreation centre, in order to create continuity and progression in children's development and learning. In addition, to facilitate co-operation, the National Association for Educators (NAE) is providing support material with suggestions, central guidelines, and local action plans for individual preschools, preschool classes and compulsory schools (NAE, 2014a). In **Finland**, where similar local variation exists, different stakeholders have discussed how to support the quality of pedagogical continuity across the country when preparing and implementing curricula for ECEC, pre-primary or primary education.

Challenge 2: Lack of shared pedagogical understanding between the two systems

Closely related to the challenges on curricular continuity, pedagogical continuity can also be impaired by ideological or practical boundaries between ECEC and primary school staff. For instance, in **Norway**, one challenge for pedagogical coherence in transition arises from teachers in kindergarten (ECEC) and school lacking knowledge of each other's pedagogical practices. Additionally, the pedagogues in kindergarten put more weight on transition and coherence than the staff in primary school. In **Slovenia**, there is a big difference between methods and learning approaches used in kindergartens (ECEC) and in schools. Moreover, kindergartens and schools in general have different expectations of how children should be prepared for school. Differing subjective perspectives about the role of kindergarten in preparation for school may cause tensions and misunderstandings between schools and kindergartens. **Finland** reports that their ECEC and school systems are quite rigid in their working culture, practices and policies, which are not easy to change when it comes to developing transitions. The idea that schools should be ready for children instead of the other way around is still rather new. It is, therefore, difficult for staff in ECEC to critically reflect on their own practice and see what can be done differently in ECEC services to smooth the child's way to school. It is also challenging for schools to rethink or change their own systems. Recent research has also highlighted the significant role of pedagogical boundaries between ECEC and primary education in hindering pedagogical collaboration (Lillejord et al., 2017).

Strategy: Reform curricula to ensure greater pedagogical continuity

One way to ensure pedagogical continuity is through reforms to curricula. For example, in **Sweden**, the preschool class (the year before starting primary education) is the result of decades of debate on the co-operation and integration between preschool and compulsory school. Bringing together the working methods and pedagogy of both sectors was not always easy. To improve curricular collaboration and to support and increase attention on the transition phase, the government initiated a set of reforms to the curricula: the sections on transition and co-operation have been elucidated in both Lpfö 98 (ECEC curriculum) and Lgr 11 (primary education curriculum). Two new chapters have been introduced in Lgr 11 to clarify the purpose and the core content of teaching in both the preschool class and the recreation centre, and to explain how teaching should give the pupils the preconditions to develop the knowledge criteria that will be further developed in compulsory school.

In **Finland**, recent revisions of the curricular documents for ECEC and primary education⁹ have established a strategy for moving ECEC and primary school pedagogies closer to each other. For instance, the traditional division of subjects in primary education has been transformed into more general learning areas, especially during the first two years of primary education (Grades 1

and 2). This follows the ideology of holistic learning, which is traditional in ECEC. At the same time, a similar structure of learning areas has been conveyed from basic education curriculum to the pre-primary and ECEC curricula. In practice, this means that in all three curricula similar, broader learning areas are named (e.g. rich world of the language; me and our community) and the development of transversal competencies across learning areas are stated (e.g. thinking and learning; participation and involvement). The result is greater understanding between ECEC and primary education.

In **Scotland (United Kingdom)**, the Curriculum for Excellence (CfE) emerged in the early 2000s as part of a major debate on the future and aims of education. The aim of CfE is to develop a coherent 3-18 age group curriculum built around capacities and learning, rather than school subjects (OECD, 2015b). The early level of CfE for most children spans from age three until the end of first grade of primary school, supporting a smooth transition in learning between ECEC (early learning and care in Scotland) and primary school (see Box 4.5).

Box 4.5 Case study: Curriculum for Excellence (CfE) and early level transitions in Scotland (United Kingdom)

The purpose of the Curriculum of Excellence (CfE) is to enable children and young people to become successful learners, confident individuals, responsible citizens and effective contributors. The introduction of CfE, as compared with the more rigid approach of the previous 5-to-14 curriculum, has supported a shift in how children learn. It has introduced a broader, more holistic approach for children from age 3 to 18 and provides a coherent, enhanced, and (importantly) more flexible curriculum.

Children move between five levels in CfE. In the early years it covers the early phases (ECEC settings and first grade of primary school) and the first grades of primary school (second to fourth grade of primary school). As children progress into primary school they will have access to a broader range of learning environments and their increasing development may mean they are ready for a greater degree of teaching instruction and opportunities to develop more skills. This may not be the case for all learners though, and CfE seeks to empower practitioners and teachers to determine the type of learning and teaching which works best for each learner at each stage.

Source: Case study provided by the Scottish Government, edited by the OECD Secretariat; sources for curricula documents are given in Table 4.A.7.

Communication between settings during transitions on the degree of learner development is key for schools to build effectively on the child's learning experiences. CfE is not prescriptive as to how progression should be captured; the professional judgement of teachers and practitioners is key. However, there is a range of national guidance in place to support teachers and practitioners at transition points (both between settings and between levels) including *Building the Ambition: National Practice Guidance on Early Learning and Childcare Children and Young People* (Scottish Government, 2014), *Statement on Curriculum for Excellence* (Education Scotland, 2016) and a number of case studies of innovative transition practice (via the National Improvement Framework) which schools may wish to consider for their own practice. Education Scotland has also recently published benchmarks (Education Scotland, 2016) for all curriculum areas (all Early Level benchmarks are available). The benchmarks have been put in place to assist practitioners and teachers in their professional judgement of learners' progress to, and achievement of, a level. Guidance on how they should be used effectively is set out in the statement on CfE.

In **Portugal**, the new *Curriculum for Preschool Education* came into force in 2016. Despite covering preschool education, the document also takes a strong stance on transition to primary school (first cycle) and critically evaluates discrepancies in staff's pedagogical thinking in ECEC and in primary school. To further aid the pedagogical continuum experienced by the child, the curriculum addresses practices that can help to narrow the gap between the two institutions, both from the perspective of the child (e.g. asking children their expectations about transitions), and from the perspective of the staff and pedagogy (e.g. discussions on cumulative learning processes and pedagogy during preschool and how to take this into account in primary education). Thus, the curriculum aids in building a concrete bridge from ECEC to primary school, by unifying pedagogical perspectives in the two systems.

Strategy: Provide opportunities for staff collaboration

Pedagogical boundaries between ECEC and primary school can also be overcome by facilitating opportunities for the staff members from both institutions to collaborate. This is done in **Slovenia**, where the kindergarten staff plan meetings with their colleagues from primary school to discuss differing expectations of children's school entry and to try to align them. In **Norway**, the national guide on transitions – *From the Eldest to the Youngest* – states that the single most defining factor for successful co-operation is that teachers in kindergarten and school prioritise co-operation and meet to plan the transition (Kunnskapsdepartementet, 2008). The goal is to achieve a common understanding of the work, clarify aims, and as early as possible clarify which teachers the children will meet at school. A national survey indicated that poor school resources and low priorities to participate are important barriers for participating in these meetings (Rambøll, 2010). Schools that did participate in such meetings, however, found them useful. Furthermore, in **Portugal**, the *Curriculum for Preschool Education* encourages staff members from ECEC and primary education to discuss the respective curricula and children's progression during preschool. The idea is that by doing so they will realise the pedagogical similarities and differences in content areas of the two systems. This will further help in creating modes of pedagogical progression for children's learning and development during transition, an aspect also suggested by recent research in the United States (Stipek et al., 2017). In **Wales (United Kingdom)**, the Aberporth Playgroup has established strong links with a variety of professionals and local primary schools. For instance, it invites teachers from the local primary school to see children who will transition to primary school, in an environment where they are most comfortable. All assessments/observations made are shared and provide foundations for children to continue their learning and development on their transition into school.

In **Austria**, greater flexibility in teachers' working hours and timetables, as well as additional hours for exchange and collaboration between staff in ECEC and in primary education, are considered prerequisites for facilitating smooth transitions (see Chapter 3). Likewise, the so called "Campus models" aim to lower the pedagogical boundaries and increase collaboration between institutions, by placing ECEC settings under the same roof as primary schools (see Chapter 5). Physical proximity makes it easier to find the time for shared discussions, which in turn give more concrete opportunities to exchange and align views on pedagogy. In **Portugal**, preschool and primary school staff working in the same school building have been able to create joint projects, raising opportunities to know and acknowledge each other's pedagogy and respective practices.

Strategy: Emphasise the role of primary school in receiving children

The concept of child-ready school, instead of school-ready child, is a strategy guiding the pedagogical route from ECEC to primary school, particularly in the Nordic countries. It means that the role of primary school in receiving children is seen to be an important factor in the smooth pedagogical transition from ECEC to primary school – a view backed up by research (e.g. Tarrant and Kagan, 2010). **Norway's** national guide *From the Eldest to the Youngest* states that it is not only about kindergartens (ECEC) transferring children to school, but also about schools' pedagogical ability to receive children, which means more responsibility needs to be taken by individual kindergartens and schools. For example the Norwegian municipality of Bergen has established a plan for co-operation between kindergartens and schools. This emphasises the responsibility and role of both kindergarten teachers and school teachers during transition. In **Sweden**, the curriculum covering compulsory school, preschool and recreation centres (Lgr 11) lays out clear expectations for primary school teachers' activities during transitions in terms of pedagogical decisions and collaboration with parents.

Portugal's recently revised *Curriculum for Preschool Education* describes the role of primary school (first cycle) as an organisation-level host receiving children from. The schools' role in receiving students is spelled out: e.g. through how children are presented to school, how classes are organised,

how children are received by each teacher, as well as the role for older students in receiving and supporting the younger ones. By indicating both the role of ECEC and primary school during transition, pedagogical boundaries can be lowered as more focus is given to the equal responsibility of both systems in enabling smooth pedagogical transition.

Challenge 3: Inconsistent delivery of pedagogy during transition

Finally, jurisdictions reported inconsistencies in pedagogical continuity and the lack of concrete strategies between ECEC and primary education as important challenges for transitions. For some jurisdictions with fully integrated curricula, the challenge stems from how teachers deliver the curriculum, which can vary from setting to setting. For instance, in **Wales**, while the Foundation Phase curriculum (2015) provides for consistency in the pedagogy of early education and primary school (by covering the 3-7-year-olds age group), there are still inconsistencies in the extent to which the pedagogy of Foundation Phase curriculum is being delivered. The quality of transition is impaired when at least one setting in the transition process does not implement the Foundation Phase curriculum effectively. In **Japan**, discontinuity in practice is also observed at the local level. The actual educational activities of each school and facility and the actual curricula at the teacher training stage are different. There is currently not enough understanding and awareness of the differences between settings, which can lead to differences in delivery of pedagogy at local level.

Having several types of facilities involved in the transition phase can also lead to inconsistencies in pedagogical delivery, a problem that has also been recognised in international research (Tarrant and Kagan, 2010). This is especially the case in countries with split systems, where a number of settings can be involved in the transition phase but which may not communicate with each other clearly enough. In many **Danish** municipalities, the pupils start in the school's after-school programme in the spring, while the actual transition to school does not take place until August. This long transition period involves many stakeholders in both administration as well as institutions, and gaps may occur in the bridge building between kindergarten (ECEC) and school. This applies to knowledge about the individual child as well as to continuity in pedagogy and co-operation with the parents. Some children experience the transition from a structured kindergarten in a group of big children to a school start in an after-school programme that does not have much in common with the school, and may not have the necessary space for the children. Also, there are no requirements for the staff working in the after-school programme to comply with the pedagogical curriculum for ECEC, thereby creating a gap between ECEC and primary school curricula.

Strategy: Ensure consistency in structures

In **Denmark**, the Danish Union of Teachers (DLF) believes that the way to overcome the challenge created by several phases and service providers during transition (described above) is for children to stay in kindergarten class until the start of school and only begin the after-school programme in August. This would create predictable organisational structures to guide children smoothly from ECEC to kindergarten class and on to primary school. Furthermore, collaboration among staff members in different parts of the educational system should be solidified. In particular, the educator in kindergarten class (pre-primary education) should be the natural pivotal point for guiding transitions between kindergarten, school and the after-school programme. Furthermore, some municipalities are working on the concept of "Continuous School Start", which seeks closer co-operation between ECEC and primary school. In this concept, the child attends primary school on his/her sixth birthday or on the next official start thereafter.

Strategy: Plan collaborative strategies

Wales (United Kingdom) has started to implement a national approach to supporting staff in providing equal delivery of pedagogy along the Foundation Phase Curriculum across the whole

jurisdiction. The *Foundation Phase Action Plan* (Welsh Government, 2016), aims to put in place a number of supportive approaches to improve consistency of delivery, including updating initial teacher training, increasing parental engagement, more support materials, as well as school-to-school support. In time, the *Foundation Phase Action Plan* will be subsumed within a new curriculum; extensive work for this major change has already begun. Ensuring that the early years' perspective of the new curriculum maximises the development of children will be a key element of the design work.

What policy development pointers arise from this research?

This final section outlines four key policy pointers for ensuring pedagogical continuity. These are cross-cutting themes emerging from the literature and countries' experiences and struggles outlined above. They are exploratory only, seeking to provide a source of inspiration when designing and revising policies and practices.

Back up curriculum implementation with significant support and training for teachers and staff

Experience suggests that even when a fully integrated curriculum for the transition period is in place, this does not always ensure pedagogical continuity (cf. Wales' experiences with its Foundation Phase Curriculum). Both Wales and Sweden advise that national-level guidance and training are also needed to support consistent curriculum implementation across jurisdictions. Sweden has found that creating a purposeful and pedagogically solid continuum from ECEC to primary school demands determined and hard work by teachers, staff, and heads of centres, as well as continued curriculum development work. This also requires facilitation by national or regional administrations as the implementation process requires a significant investment of time. Joint discussions on curricula can benefit both staff in ECEC and in primary school (e.g. in Portugal).

Encourage active collaboration by teachers across settings to break down pedagogical boundaries

Several jurisdictions report how differences in the ideology of ECEC settings and primary schools impair pedagogical continuity during transition (e.g. Norway, Slovenia and Finland). The benefits of shared pedagogical understanding, as well as initiatives to develop shared key concepts and approaches, are widely acknowledged by jurisdictions (particularly the Nordic countries) as well as international research (e.g. Lillejord et al., 2017). ECEC and primary school staff should be more actively encouraged to create joint efforts and take a more hands-on role in planning transition practices. Solutions developed by jurisdictions include making time and space for staff across settings to discuss their pedagogical underpinnings and learn from each other in terms of curriculum work and designing shared projects (Portugal), facilitating opportunities for observing what daily activities and learning environments in both sectors are like (Wales (United Kingdom)), and encouraging staff to implement innovative transition practices (Denmark).

Develop ways of dealing with the increasingly complex nature of transitions

It is not just ECEC and primary schools which are concerned with pedagogical continuity across transitions: before and after-school services are also affected (e.g. as noted by Denmark and Sweden). Such facilities require extra attention in terms of pedagogical continuity; their staff members also need to be involved in sharing the pedagogical responsibility. Moreover, as societies become more mobile, in many countries not all children transfer from the same ECEC settings to the same primary schools. This makes ensuring pedagogical continuity increasingly complex due to lack of true and sustainable ways of designing pedagogical continuity with multiple partners. Portugal is tackling this by organising collaborative opportunities for the staff members from all the various settings to

meet and discuss continuity in their pedagogies. It is also important to invent innovative strategies to support pedagogical continuity without relying on physical meetings or transferring portfolios, which may not be practical when many partners are involved in transition. So far jurisdictions have not found ways to tackle this, making it even more urgent to find concrete ways to bring together multiple actors for pedagogical dialogue. Support from the national level can be provided through a shared curriculum and by providing common guidance and joint training on implementation.

Build an evidence base for how pedagogical barriers can be overcome

The literature review conducted as part of this research revealed some gaps that need to be filled. For example, research is scarce on daily pedagogical approaches and practices developed in ECEC and in primary school groups and on how their continuity and accumulation can affect children's experiences during and after transition. Given that jurisdictions found pedagogical boundaries to be a key challenge in facilitating smooth pedagogical transition for children, more comprehensive research-based evidence on the impact of staff's mutually agreed and implemented pedagogical views on children's outcomes during transition will encourage jurisdictions at both national and local levels to further develop and target their support systems.

Annex 4.A. Detailed country-by-country responses

For **WEB** tables see: <http://dx.doi.org/10.1787/9789264276253-en>

Table 4.A.1 Alignment between early childhood education and care (last year of ECEC in particular) and primary school curriculum

WEB	Table 4.A.2 Curricular continuity between contents of ECEC and primary school curriculum frameworks
WEB	Table 4.A.3 Average hours of participation in last year of ECEC and first year of primary education, 2014
WEB	Table 4.A.4 Regulated staff-child ratio in final year of ECEC (ISCED 0.2) and first year of primary school (ISCED 1)
WEB	Table 4.A.5 Regulated maximum group size in final year of the ECEC and the first year of the primary education
	Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions
	Table 4.A.7 List of the national curricular documents and frameworks

Table 4.A.1 Alignment between early childhood education and care (last year of ECEC in particular) and primary school curriculum

Jurisdiction name (this can refer to a country or state/region/territory)	Jurisdiction name (this can refer to a country or state/region/territory)
Austria	0
Belgium – Flemish Community	0
Canada – Alberta	2
Canada – British Columbia*	2
Canada – Manitoba	1
Canada – New Brunswick*	2
Canada – Newfoundland and Labrador	0
Canada – Northwest Territories	1
Canada – Nova Scotia	0
Canada – Nunavut	1
Canada – Ontario	1
Canada – Prince Edward Island	1
Canada – Quebec	2
Canada – Saskatchewan	0
Canada – Yukon*	2
Chile	1
Colombia*	1
Croatia*	2
Czech Republic	0
Denmark	0
Finland	1
Germany – Baden-Württemberg	1
Germany – Bavaria	1
Germany – Berlin	1
Germany – Brandenburg	1
Germany – Bremen	1
Germany – Hamburg	1
Germany – Hesse	1
Germany – Lower Saxony	1
Germany – Mecklenburg-Western Pomerania	1
Germany – North Rhine-Westphalia	1
Germany – Rhineland-Palatinate	1
Germany – Saarland	1
Germany – Saxony	1
Germany – Saxony-Anhalt	1
Germany – Schleswig-Holstein	1
Germany – Thuringia	1
Greece	1
Hungary	0
Ireland*	0
Italy	2
Japan	1
Kazakhstan	0
Luxembourg	2
Mexico	1
New Zealand	1
Netherlands	0
Norway	0
Poland*	2
Portugal	1
Slovak Republic	0
Slovenia	1
Spain	1
Sweden*	2
Switzerland – French-speaking cantons	2
Switzerland – German speaking cantons	2
Switzerland – Italian speaking cantons	2
Turkey	1
United Kingdom – Wales	2

0 = Not aligned; 1 = aligned; 2 = curriculum covers both last year of ISCED 0.2 and ISCED 1

Jurisdictions reported the curricular alignment between the curriculum frameworks in place during the last year of the ECEC and the first year of the primary education. For some jurisdictions the last year of ECEC refers to pre-primary education, which is sometimes more clearly aligned with primary education than ECEC for younger children.

* Data for New Brunswick (Canada) refers to the Curriculum for compulsory school K- 2 which covers ages 5-7 years.

* Data for British Columbia (Canada) refers to BC Ministry of Education Curriculum which covers ages 5 onwards.

* Data for Yukon (Canada) refers to British Columbia Primary Program for ages 5 years – 18 years (K – grade 12).

* Regarding Colombia, the early childhood curriculum framework is still being developed and will be released in 2016 but will be aligned with the primary school curriculum.

* Data for Croatia refers to National Strategy for science, education and sports covering ages from 6 months to 18 years

* Regarding Ireland, it is changing. Aistear: the Early Childhood Curriculum Framework was published in 2009, ten years after the Primary School Curriculum. Over the coming years, the primary curriculum will be redeveloped and as part of this, it will be aligned with the principles and methodologies of Aistear. The first part of the primary curriculum to reflect this is the new Primary Language Curriculum (for English and Irish) published in late 2015 and available at www.curriculumonline.ie.

* In Poland, the Core curriculum for preschool and general education in individual types of schools covers both preschool (pre-primary education) and primary education but has separate content for both (documents as separate annexes). Particularly the Core Curriculum for preschool education in kindergartens and other forms of preschool settings states goals for transition to primary school.

* Regarding Sweden, the data refers to the Curriculum for Compulsory school, the Preschool class and the Out of school centre (Lgr 11) and covers both the preschool class (pre-primary education) and primary school. The preschool curriculum (Lpfö 98) and primary school curriculum (Lgr 11) are aligned but not integrated.

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal, June 2011 and 2015.

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions

	Child care only Early childhood education and/or integrated early childhood education and care No standard curriculum is in place for the specified age group							Compulsory ECEC Compulsory primary schooling												
	Jurisdiction	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds	11 year-olds	12 year-olds						
Australia	Belonging, Being, Becoming - Early Years Learning Framework for Australia or equivalent state-based approved learning framework							The Australian Curriculum												
Austria	Bundesländerübergreifender BildungsRahmenPlan für elementare Bildungseinrichtungen in Österreich (Statewide Framework curriculum for ECEC institutions in Austria)							Modul für das letzte Jahr in Bildungseinrichtungen. Vertiefende Ausführungen zum bundesländerübergreifenden BildungsRahmenPlan (Statewide Framework curriculum for ECEC institutions in Austria. Addition to the Austrian Framework Curriculum for ECEC institutions in Austria (an addition to the Statewide Framework))												
Belgium – Flemish Community	Het pedagogische raamwerk voor de kinderopvang van baby's en peuters (Pedagogical framework for childcare for babies and toddlers)			2,5 y Ontwikkelingsdoelen (developmental objectives for 2,5-6 years)					Lehrplan der Volksschule (Curriculum of Primary School)											
Belgium-French Community	Code de qualité (Oser/viser la qualité)			Le décret mission, le programme du réseau de l'école et le programme de l'école					Eindtermen (attainment targets for 6-12 years)											
Canada - Alberta						Kindergarten program statement														
						Alberta Program of Studies		up to 18												
						Standards for the Provision of Early Childhood Special Education														
Canada – British Columbia	The Alberta Early Learning and Childcare Curriculum Framework: Play, Participation and Possibilities																			
	British Columbia Early Learning Framework (Optional)							BC Ministry of Education Curriculum												
	BC Ministry of Education Curriculum (Kindergarten – Optional)							up to 18												

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions (continued)

Jurisdiction	Child care only Early childhood education and/or integrated early childhood education and care No standard curriculum is in place for the specified age group							Compulsory ECEC Compulsory primary schooling									
	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds	11 year-olds	12 year-olds				
Canada - Manitoba	Starting Early, Starting Strong: A Guide for Play-Based Early Learning in Manitoba Birth to Six																
Canada - Manitoba	Early Returns: Manitoba's Early Learning and Child Care Curriculum Framework for Infant Programs		Early Returns: Manitoba's Early Learning and Child Care Curriculum Framework for Preschool Centres and Nursery Schools														
Canada - Manitoba								Language arts curriculum; mathematics curriculum; science curriculum; social studies curriculum; arts education curriculum; physical education/health education curriculum; English as an additional language curriculum; literacy with information and communication technology					up to 18				
Canada - New Brunswick	Early Learning and Child Care Curriculum Framework (English) and Curriculum Educatif Services de Garde (French)				Curriculum for compulsory school K- 2												
Canada - Newfoundland and Labrador	Provincial Early Childhood Learning (ECL) Curriculum Framework																
Canada - Newfoundland and Labrador	Regulated Child Care Program Standards (Birth to age 12.11 years)							Curriculum for Compulsory school Grades 1-12 (students with exceptionalities may continue to age 21 yrs)					up to 18				
Canada - Northwest Territories					KinderStart Program Guide 3.9 years - 5 years	Completely Kindergarten Guide (2010) 4.9 years - 5.9 years											
Canada - Nova Scotia					Integrated Kindergarten Curriculum		Each curricular area currently has a separate curricular document										
Canada - Nunavut					Specifically for Grade Primary as a component of the Public		teased out School Program	Nova Scotia Public School Program					up to 18				
Canada - Ontario					The Kindergarten Program 2016		The Ontario Curriculum Grades 1-8										
Canada - Prince Edward Island	How Does Learning Happen? Ontario's Pedagogy for Early Years (2014). Birth to age 8.																
Canada - Prince Edward Island	PEI Early Learning Framework				Curriculum		for compulsory school K- 12 (Integrated by subject)					up to 18					

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions (continued)

Jurisdiction	Child care only Early childhood education and/or integrated early childhood education and care No standard curriculum is in place for the specified age group						Compulsory ECEC Compulsory primary schooling									
	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds	11 year-olds	12 year-olds			
Canada – Quebec	Acceuillir la petite enfance. Le programme éducatif des services de garde du Québec (Meeting Early Childhood Needs: Québec's Educational Program for Childcare Services) (not mandatory)						Un programme d'éducation préscolaire 5 ans (Preschool Education Program) (mandatory)	Programme de formation de l'école québécoise (Québec Education Program) (4-12 years)								
	Des programmes à demi-temps et à temps plein pour les enfants de 4 ans en milieu défavorisé (Preschool Education Program Full-day Kindergarten for 4 years old in Disadvantaged Areas) (Pre-K)															
Canada – Saskatchewan	Play and Exploration: Early Learning program Guide for Infants and Toddlers (suggested curriculum)	Play and Exploration: Early Learning Program Guide and Essential Learning Experiences (suggested curriculum)		Kindergarten - Children First: A Resource for Kindergarten and Kindergarten Curriculum (mandatory curriculum); French Immersion Kindergarten; Fransaskois Kindergarten - Maternelle, Education fransaskois	Saskatchewan Core Curriculum Grades 1,2,3											
Canada – Yukon	British Columbia Early Learning Framework (Optional)						BC Ministry of Education Curriculum up to 18									

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions (continued)

	Child care only Early childhood education and/or integrated early childhood education and care No standard curriculum is in place for the specified age group							Compulsory ECEC Compulsory primary schooling							
Jurisdiction	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds	11 year-olds	12 year-olds		
Chile	Bases Curriculares de Educación Pavularia (Early Childhood Education Curricular Bases)						Bases Curriculares para la Educación Básica (Curricular Bases for Primary Education)								
Colombia	National curriculum for early childhood education and the transition year are in construction at this time. It is planned to be released in 2016.							Estándares básicos de competencias y derechos básicos de aprendizaje (Basic standards for competencies and basic learning rights)							
Croatia	Strategija obrazovanja, znanosti i tehnologije (National Strategy for Science, Education and Sports (covers all children from 6 months to 18 years))														
	Nacionalni kurikulum za rani i predškolski odgoj i obrazovanje (National Curriculum for Early Childhood and Preschool Education)							Strategija obrazovanja, znanosti i tehnologije (National Strategy for Science, Education and Sports (covers all children from 6 months to 18 years))							
Czech Republic		Framework Educational Programme for Preschool Education (FEP PE)			Framework Educational Programme for Basic Education (FEP BE)										
Denmark	Pædagogiske læreplaner (pedagogical curriculum)							Fælles Mål (Common Objectives) for each grade in primary school, including preschool class							
Finland	Varhaiskasvatusuunitelman Perusteet (National curriculum guidelines on early childhood education and care)							Esiopetuksen Opetussuunnitelman Perusteet (National Core Curriculum for Pre-primary education)	Perusopetuksen Opetussuunnitelman Perusteet (National Core Curriculum for Basic Education)						
France	Orientations code de la santé publique et projets d'établissements (Code of Public Health Guidelines and Project Settings)	L'école maternelle : un cycle unique, fondamental pour la réussite de tous (Preschool: a unique cycle, fundamental for the success of all)			Programmes d'enseignement du cycle des apprentissages fondamentaux (cycle 2, 6 à 8 ans), du cycle de consolidation (cycle 3, 9 à 11 ans) et du cycle des approfondissements (cycle 4, à partir de 12 ans). (Curriculum of the fundamental learning cycle (cycle 2, 6 to 8 years old), the cycle of consolidation (cycle 3, 9 to 11 years old) and the cycle of deepening (cycle 4, since 12 years old))										
Germany (Baden-Württemberg)	Orientierungsplan für Bildung und Erziehung für die baden-württembergischen Kinder (Orientation plan for education and care of kindergartens and							gärten und weiteren Kindertageseinrichtungen other ECEC settings in Baden-Württemberg)							
Germany (Bavaria)	Gemeinsam Verantwortung tragen – Bayerische Leitlinien für die Bildung und Erziehung von Kindern Ende der Grundschulzeit (Share responsibility – Bavarian guidelines for education and care							Bildungsplan für die Grundschule (Curriculum for primary education)							
Germany (Berlin)	Berliner Bildungsprogramm für Kitas und Kindertagespflege (Berlin educational programme for ECEC centres and family daycare)							LehrplanPLUS Grundschule (Curriculum plus for primary education)							
Germany (Brandenburg)	Grundsätze elementarer Bildung in Einrichtungen der Kindertagesbetreuung im Land Brandenburg (principles of elementary education in ECEC centres in Brandenburg)							Rahmenlehrpläne (Framework Curriculum)							
Germany (Bremen)	Rahmenplan für Bildung und Erziehung im Elementarbereich – Bremen (Framework curriculum for education and care in the elementary sector – Bremen)							Rahmenlehrpläne (Framework Curriculum)							
Germany (Hamburg)	Hamburger Bildungsempfehlungen für die Bildung (Recommendations on education for education and							und Erziehung von Kindern in Tages Einrichtungen care of children in daycare settings in Hamburg)							
								Bildungsplan der Grundschule in Hamburg (Curriculum for primary education in Hamburg)							

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions (continued)

Jurisdiction	Child care only		Compulsory ECEC											
	Early childhood education and/or integrated early childhood education and care		Compulsory primary schooling											
	No standard curriculum is in place for the specified age group													
Jurisdiction	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds	11 year-olds	12 year-olds	
Germany (Hesse)	Bildung von Anfang an. Bildungs- und Erziehungsplan für Kinder von 0 bis 10 Jahren in Hessen (Education from the beginning. Curriculum for children from 0 to 10 years in Hesse)													
					Rahmenplan Grundschule (Framework curriculum for primary education)									
Germany (Mecklenburg-Western Pomerania)	Bildungskonzeption für 0- bis 10-jährige Kinder in Mecklenburg-Vorpommern. Zur Arbeit in Kindertageseinrichtungen und Kindertagespflege (Educational concept for children 0 to 10 in Mecklenburg-Vorpommern. For working in ECEC settings and family daycare)													
					Rahmenlehrpläne (Framework Curriculum)									
Germany (Lower Saxony)	Orientierungsplan für Bildung und Erziehung im Elementarbereich niedersächsischer Tageseinrichtungen für Kinder (Orientation plan for education and care in elementary education in lower saxonian daycare centres for children)				Rahmenrichtlinien für die Grundschule in Niedersachsen (Framework curriculum for primary education in Lower Saxony)									
Germany (North Rhine-Westphalia)	Mehr Chancen durch Bildung von Anfang an - Grundsätze zur Bildungsförderung für Kinder im Primarbereich in Nordrhein- (More chances through Westfalen education for children 0 to 10 in ECEC centres and primary schools)				von 0 bis 10 Jahren in Kindertageseinrichtungen und Schulen from the beginning. Principles for educational support in North Rhine-Westphalia)									
					Rahmenplan Grundschule (Framework curriculum for primary education)									
Germany (Rhineland-Palatinate)	Bildungs- und Erziehungsempfehlungen für Kindertagesstätten in Rheinland-Pfalz (Recommendations on education and care in ECEC settings in Rhineland-Palatinate)								up to 15					
					Rahmenplan Grundschule (Framework curriculum for primary education)									
Germany (Saarland)	Bildungsprogramm für saarländische Kindergärten (educational programme for kindergartens in Saarland)				Rahmenplan für die Grundschule (Framework curriculum for primary education)									
Germany (Saxony)	Sächsischer Bildungsplan - ein Leitfaden für pädagogische Fachkräfte in Krippen, (Saxonian curriculum – a guideline for ECEC staff in crèches, kindergartens)				Kindergärten und Horten sowie für Kindertagespflege and day care centres, as well as family day care)									
					Lehrpläne Primarstufe									
Germany (Saxony-Anhalt)	Bildungsprogramm für Kindertageseinrichtungen in Sachsen-Anhalt. Bildung: elementar – Bildung von Anfang an (educational programme for ECEC settings in Saxony-Anhalt. Education: elementary – Education from the beginning)								up to 15					
					Lehrplan Grundschule - Grundsatzband									
Germany (Schleswig-Holstein)	Erfolgreich starten: Leitlinien zum Bildungsauftrag von Kindertageseinrichtungen in Schleswig-Holstein (Starting successfully: guidelines on the educational task of ECEC settings in Schleswig-Holstein)								up to 15					
					Lehrpläne für die Primarstufe (Curriculum for primary education)									
Germany (Thuringia)	Thüringer Bildungsplan bis 18 Jahre. Bildungsansprüche von Kindern und Jugendlichen (Thuringian curriculum upto 18 years. Educational demands of children and adolescents)								up to 18					
					Thüringer Lehrpläne für die Grundschule (Curriculum for primary education in Thuringia)									
Greece			Dimotiko Curriculum for Preschool Education	Sxoleio					Dimotiko sxoleio (Interdisciplinary Integrated Curriculum Framework for Primary Education)					

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions (continued)

Jurisdiction	Child care only		Compulsory ECEC																			
	Early childhood education and/or integrated early childhood education and care				Compulsory primary schooling																	
	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds	11 year-olds	12 year-olds									
Hungary	A bölcsődei nevelés-gondozás szakmai szabályai (National Guidance for the education and care of children under the age of 3)			Óvodai nevelés országos alapprogramja (National Basic Programme for Kindergarten Education)				Nemzeti alaptanterv + Kerettantervek (National Core Curriculum + Framework Curricula)				up to 18										
Ireland	Early Childhood Curriculum Framework: Aistear				Primary School Curriculum																	
Italy				Indicazioni Nazionali per il curricolo for preschool and for the first cycle		della scuola dell'infanzia e del primo ciclo di istruzione (National curricular guidelines of education)																
Japan	The Course of Study and Guideline of Day Care for Integrated Centre for Early Childhood Education and Care			Course of Study for Kindergarten			The Course of Study for Elementary School															
	National curriculum of daycare centre																					
Kazakhstan		Типовая учебная программа дошкольного воспитания и обучения (Standard curriculum for early childhood education and care)						Different curricula for different subjects for grades 1-4														
Korea	(Standardised childcare curriculum)			(Nuri Curriculum) (not mandatory)																		
Luxembourg	Cadre de référence pour l'éducation non-formelle Bildungsrahmenplan für non-formale Bildung (Framework for non-formal education for young			des enfants et des jeunes im Kindes und Jugendalter (0 - 12) children, school-aged children and youth)																		
				Plan d'études		de l'enseignement fondamental (National curriculum for fundamental education)*																
Mexico	Modelo de Atención con Enfoque Integral para la Educación Inicial			Programa de Estudio 2011 Guía para la Educadora. Educación Básica Preescolar			Programas de Estudio 2011. Guía para el Maestro. Educación Básica Primaria															
Netherlands				2.5y Targeted ECEC approved curriculum		Kern (Core)	doelen* Objectives 4-12 years)															
New Zealand	Te Whāriki (early childhood curriculum)				New Zealand	Curriculum and Te Marautanga o Aotearoa (the national curriculum for Māori medium schooling)																
Norway	Rammeplan for barnehagens innhold og oppgaver (Framework Plan for the Content and Tasks of Kindergartens)				Kunnskapsløftet (The knowledge promotion curriculum)																	
Poland					Podstawa programowa wychowania przedszkolnego (Core curriculum for pre-school and general education in			oraz kształcenia ogólnego w poszczególnych typach szkół individual types of schools)			up to 18											
					Podstawa programowa wychowania przedszkolnego dla przedszkoli oraz innych form wychowania przedszkolnego (Core curriculum for pre-school education in kindergartens and other forms of pre- school settings)			Podstawa programowa kształcenia ogólnego dla szkół podstawowych (Core curriculum of general education in primary schools)			up to 18											
Portugal				Orientações Curriculares para a Educação Pré-Escolar (The Curriculum Guidelines for Preschool Education)		Different curricula for different subjects, plus different guidance frameworks for children with special needs																
Slovak Republic				Štátны vzdelávací program pre predprimárne vzdelenie v materských školách (State Education Programme for Pre-primary Education in Kindergarten)		Štátny vzdelávací program pre primárne vzdelenie (State Education Programme for Primary Education)																

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions (continued)

Jurisdiction	Child care only		Compulsory ECEC											
	Early childhood education and/or integrated early childhood education and care		Compulsory primary schooling											
	No standard curriculum is in place for the specified age group													
Jurisdiction	0 year-olds	1 year-olds	2 year-olds	3 year-olds	4 year-olds	5 year-olds	6 year-olds	7 year-olds	8 year-olds	9 year-olds	10 year-olds	11 year-olds	12 year-olds	
Slovenia		Kurikulum za vrtce (Kindergarten Curriculum)				Program osnovne šole (Basic school programme)				up to 15				
Spain			Real Decreto 1630/2006 de 29 de Diciembre (Real Decree 1630/2006, 29th December)				Real Decreto 126/2014 de 28 de Febrero (Real Decree 126/2014, 28th February)							
Sweden		Läroplan för förskolan (Lfö 98, revised 2010) (Curriculum for the Preschool)				Läroplan Compulsory	for grundskolan, förskoleklassen och fritidshemmet (Lgr 11). (Curriculum for the school, the Preschool class and the Out of school centre)				up to 16			
Switzerland				Lehrplan 21 Plan d'études romand Piano di studio			(curriculum for german-speaking cantons) (curriculum for french-speaking cantons) (curriculum for italian-speaking canton)				Up to 15			
Turkey	Aylık çocukların eğitim programı (Educational curriculum)		Okul Öncesi Eğitim Programı (Pre-primary Curriculum)			There is no curriculum framework for primary education, but there are instruction schedules for different subjects								
United Kingdom-England	Early Years Foundation Stage Statutory Framework													
United Kingdom-Scotland	Pre-birth to three - staff guidelines				Curriculum	for Excellence				Up to 18				
United Kingdom-Wales			Curriculum for Wales – Foundation Phase Framework											
	Flying Start (targeted for disadvantaged families ages 2-3)		Curriculum	for Wales – Foundation Phase Framework										

Notes: References and links to all these curricula are available in the Table below (Table 4.A.7).

- In Newfoundland and Labrador (Canada), a provincial ECE Curriculum Framework is currently being piloted as a draft in select locations in the following settings – in home, in regulated child care, in the community and in school (KinderStart, kindergarten and primary); for further information, please see www.ed.gov.nl.ca/edu/earlychildhood/initiatives.html#frame.
- In the Netherlands, the kerndoelen are not a curriculum, they are age-appropriate goals of what students that age should have learned.

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal", June 2011 and 2015.

Table 4.A.7 List of the national curricular documents and frameworks

Jurisdiction	Curriculum (year)	Reference, if available
Austria	The Framework Curriculum for ECEC (2009)	Charlotte Bühler Institut (2009). <i>Bundesländerübergreifender BildungsRahmenPlan für elementare Bildungseinrichtungen in Österreich</i> [Framework curriculum for ECEC institutions in Austria], Charlotte Bühler Institut, Vienna, www.charlotte-buehler-institut.at/service/index.htm
	The Addition to the Austrian Framework Curriculum for five to six-year-olds (2010)	Charlotte Bühler Institut (2010). <i>Modul für das letzte Jahr in Bildungseinrichtungen. Vertiefende Ausführungen zum bundesländerübergreifenden BildungsRahmenPlan</i> [Module for Children in Their Last Year of Kindergarten. Addition to the Austrian Framework Curriculum for ECEC institutions in Austria], Charlotte Bühler Institut, Vienna, www.charlotte-buehler-institut.at/service/index.htm
British Columbia (Canada)	British Columbia Early Learning Framework (0-5) The BC Ministry of Education Curriculum for Kindergarten (optional)	
Croatia	National Strategy for Science, Education and Sports	
Denmark	Pedagogical curriculum (Pædagogiske lærplaner)	
Finland	Core Curriculum for Basic Education in Finland (2014)	Finnish National Board of Education (2014a), <i>Core Curriculum for Basic Education in Finland</i> , Finnish National Board of Education, Helsinki, www.oph.fi/english/curricula_and_qualifications/basic_education
	Core Curriculum for Early Childhood Education and Care in Finland (2016)	Finnish National Board of Education (2016), <i>Core Curriculum for Early Childhood Education and Care in Finland</i> , Finnish National Board of Education, Helsinki, www.oph.fi/english/education_system/early_childhood_education
	Core Curriculum for Pre-Primary Education in Finland (2014)	Finnish National Board of Education (2014b), <i>Core Curriculum for Pre-Primary Education in Finland</i> , Finnish National Board of Education, Helsinki, www.oph.fi/english/curricula_and_qualifications/pre-primary%20_education
Italy	National Curricular Guidelines for Preschool and for the First Cycle of Education (<i>Indicazioni Nazionali per il curricolo della scuola dell'infanzia e del primo ciclo di istruzione</i>)	
Korea	The Standardised Childcare Curriculum Nuri Curriculum	
Luxembourg	Bildungsrahmenplan für non-formale Bildung im Kindes und Jugendalter [0-12]	
	Plan d'Etudes de l'enseignement fondamental	
New Brunswick (Canada)	Curriculum for compulsory school K- 2	
New Zealand	The New Zealand Curriculum	
	Te Marautanga o Aotearoa	
Norway	Framework Plan for the Content and Tasks of Kindergartens (2006)	Kunnskapsdepartementet (2006), <i>Forskrift om rammeplan for barnehagens innhold og oppgaver</i> . 2006.03.01 nr. 0266. [The Framework Plan for the Content and Tasks of Kindergartens], www.udir.no/globalassets/upload/barnehage/rammeplan/framework_plan_for_the_content_and_tasks_of_kindergartens_2011_rammeplan_engelsk.pdf
	The National Curriculum for Knowledge Promotion in Primary and Secondary Education and Training (LK06).	Utdanningsdirektoratet. <i>The National Curriculum for Knowledge Promotion in Primary and Secondary Education and Training (LK06)</i> . Comprises the Core Curriculum, the Quality Framework, subject curricula and distribution of teaching hours per subject. Utdanningsdirektoratet, cf. www.udir.no/Stottemeny/English/Curriculum-in-English/

4. PEDAGOGICAL CONTINUITY IN TRANSITIONS FROM EARLY CHILDHOOD EDUCATION AND CARE TO PRIMARY SCHOOL

Jurisdiction	Curriculum (year)	Reference, if available
Nunavut (Canada)	<i>Curriculum Foundations</i> <i>The Elementary Teacher's Planning Guide</i>	
Poland	<i>Core Curriculum for Preschool and General Education in Individual Types of Schools</i> <i>Core Curriculum for Preschool Education in Kindergartens and Other Forms of Preschool Settings</i>	
Portugal	<i>Curriculum for Preschool Education</i>	Lopes da Silva, I., L. Marques, L. Mata and M. Rosa (2016), <i>Orientações Curriculares para a Educação Pré-Escolar [Curriculum for Preschool Education]</i> , Direção-Geral da Educação, Ministério da Educação, Lisbon.
Québec (Canada)	<i>Meeting Early Childhood Needs: Québec's Educational Program for Childcare Services</i> <i>Programme de formation de l'école québécoise</i>	
Scotland (United Kingdom)	<i>Curriculum for Excellence</i>	Education Scotland (2016), <i>Curriculum for Excellence: A Statement for Practitioners from HM Chief Inspector of Education</i> , Education Scotland, Livingston, https://education.gov.scot/improvement/Documents/cfstatement.pdf
Slovenia	<i>Kindergarten curriculum</i>	Ministry of Education, Science and Sport (1999), <i>Kurikulum za vrtce [Kindergarten Curriculum]</i> , Ministry of Education, Science and Sport, Ljubljana, www.mizs.gov.si/en/legislation_and_documents/
Sweden	<i>Curriculum for the Preschool in Sweden, Lpfö 98</i> <i>Curriculum for the compulsory school, preschool class and the recreation centre in Sweden, Lgr11</i>	Skolverket (2010), <i>Curriculum for the Preschool in Sweden, Lpfö 98</i> , (2010, rev.), Skolverket, Stockholm, www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?xurl=%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FRecord%3Fk%3D2704 Skolverket (2011), <i>Curriculum for the compulsory school, preschool class and the recreation centre in Sweden, Lgr11</i> , Skolverket, Stockholm, www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?xurl=%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FRecord%3Fk%3D2687
Wales (United Kingdom)	<i>Foundation Phase Framework (2015)</i>	Welsh Government (2015), <i>Foundation Phase Framework</i> , Welsh Government, Cardiff, http://gov.wales/topics/educationandskills/earlyyearshome/foundation-phase/?lang=en .

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal", June 2011 and 2015.

Notes

1. Austria, Denmark, Finland, Japan, Norway, Slovenia, Sweden, Wales (United Kingdom) and Kazakhstan (partner country).
2. Child-centred pedagogy and staff's practices refer to staff providing children with guidance and opportunities for directing their own exploration of objects and academic topics, providing strong support for children's learning efforts and social skills, and being sensitive to children's needs and interests. Teacher-directed pedagogy and staff's practices refers to structured drill-and-practice group lessons, the teaching of discrete skills in small steps, and praise when predetermined goals are reached. Children's interests and the development of their social skills receive less attention.
3. Hybrid pedagogy refers to pedagogy that minimises differences between ECEC and primary school by discussing and making traditions and cultures of both systems transparent (Lillejord et al., 2017).
4. Children were considered vulnerable when scoring at or below the 10th percentile on each of the Early Development Instrument (EDI) domains (i.e., Physical health and well-being; social competence; emotional maturity; language and cognitive development; and communication skills and general knowledge).
5. Targeted ECEC approved curriculum for children (2.5-4 years of age) from disadvantaged backgrounds.
6. In Sweden the preschool class (pre-primary education) constitutes a bridge between the preschool (ECEC) and compulsory school and is a voluntary form of school for the children. Municipalities are obliged to offer all six year olds a place for at least 525 hours during a school year. The recreation centre is an out of school centre that complements the education in the preschool class and in school. Pupils aged 6-12, whose parents are either working or studying, have the right to attend recreation centres after school is out. Children enter primary school during the year they turn seven
7. The national framework includes a chapter dealing with transitions.
8. The maximum number of children for each member of staff working directly with children.
9. For ECEC and pre-primary education, Core curriculum for ECEC in Finland, 2016 and Core curriculum for pre-primary education, 2014; and for primary education, the Core curriculum for basic education, 2014.

References

- Abry, T., et al. (2015), "Pre-school and kindergarten teachers' beliefs about early school competencies: Misalignment matters for kindergarten adjustment", *Early Childhood Research Quarterly*, Vol. 31/2, pp. 78-88.
- Ackesjö, H. (2013), "Children crossing borders: School visits as initial incorporation rites in transition to preschool class", *International Journal of Early Childhood*, Vol. 45/3, pp. 387-410.
- Ahtola, A., Get al. (2011), "Transition to formal schooling: Do transition practices matter for academic performance?", *Early Childhood Research Quarterly*, Vol. 26/3, pp. 295-302.
- Ahtola, A., et al. (2016), "The concordance between teachers' and parents' perceptions of school transition practices: A solid base for the future", *Scandinavian Journal of Educational Research*, Vol. 60/2, pp. 168-181.
- Ahtola, A., et al. (2012), "Successful handling of entrance to formal schooling: Transition practices as a local innovation", *International Journal of Transitions in Childhood*, Vol. 5, pp. 3-21.
- Alatalo, T., J. Meier and E. Frank (2016), "Transition between Swedish pre-school and pre-school class: A question about interweaving care and knowledge", *Early Childhood Education Journal*, Vol. 44/2, pp. 155-167.
- Bassok, D., S. Latham and A. Rorem (2016), "Is kindergarten the new first grade?", *AERA Open*, Vol. 1/4, pp. 1-31.
- Bennet, J. (2013), "A response from the co-author of 'a strong and equal partnership'", in P. Moss (Ed.), *Early childhood and compulsory education: Reconceptualising the relationship*, pp. 52-73, Routledge, London.
- Bennett, J. (2007), "A strong and equal partnership", in M. Woodhead and P. Moss (Eds), *Early Childhood and Primary Education, Early Childhood in Focus 2: Transitions in the lives of young children*, pp. 40-41, Young Children, Milton Keynes, Open University.
- Bennet, J. (2004), *Five curriculum outlines. Thematic Review of Early Childhood Education and Care Policy*, OECD Publishing, Paris, <https://www.oecd.org/edu/school/31672150.pdf>.
- Bierman, K.L. et al. (2008), "Promoting academic and social-emotional school readiness: The Head Start REDI Program", *Child Development*, Vol. 79/6, pp. 1802-1817.
- Blatchford, P. and P. Mortimore (1994), "The issue of class size for young children in schools: What can we learn from research?", *Oxford Review of Education*, Vol. 20, pp. 411-428.
- BMUKK (2012), *Der sonderpädagogische Förderbedarf. Qualitätsstandards und Informationsmaterialien* [Special educational needs for support. Quality standards and information materials], Vienna, www.cisonline.at/fileadmin/kategorien/Der_sonderpaedagogische_Foerderbedarf-Qualitaetsstandards_und_Informationsmaterialien.pdf.
- Broekhuizen, M., et al. (2016), "Classroom quality at pre-kindergarten and kindergarten and children's social skills and behavior problems", *Early Childhood Research Quarterly*, Vol. 36/3, pp. 212-222.
- Bruner, J. S. (1960), *The process of education*, Vintage Books, New York.
- Brühwiler C. and P. Blatchford (2011), "Effects of class size and adaptive teaching competency on classroom processes and academic outcome", *Learning and Instruction*, Vol. 21/1, pp. 95-108.
- Cadima, J., T. Leal and M. Burchinal (2010), "The quality of teacher-student interactions: associations with first graders' academic and behavioral outcomes", *Journal of School Psychology*, Vol. 48/6, pp. 457-482.

- Cannon, J.S., A. Jacknowitz and G. Painter (2006), "Is full better than half? Examining the longitudinal effects of full-day kindergarten attendance", *Journal of Policy Analysis and Management*, Vol. 25/2, pp. 299-321.
- Chan, W.L. (2012), "Expectations for the transition from kindergarten to primary school amongst teachers, parents and children", *Early Child Development and Care*, Vol. 182/5, pp. 639-664.
- Charlotte Bühler Institut (2016), *Austria Country Background Report on Transitions from ECEC to Primary School*, Charlotte Bühler Institut, Vienna, www.oecd.org/edu/school/SS5-country-background-report-austria.pdf.
- Charlotte Bühler Institut (2015), *Individualisierung und differenzierte Förderung in der Schuleingangsphase* [Individualisation and differentiated support in the school entrance phase], BMBF, Vienna.
- Clements, D. and J. Sarama (2008), "Experimental evaluation of the effects of a research-based preschool mathematics curriculum", *American Educational Research Journal*, Vol. 45/2, pp. 443-494.
- Coghlann, M., et al. (2009), "Narrowing the gap in outcomes for young children through effective practices in the early years (C4EO)", *Early Years Research Review*, Centre for Excellence, London, www.nfer.ac.uk/publications/11108.
- Curby, T.W., S.E. Rimm-Kaufman and C.C. Ponitz (2009), "Teacher-child interactions and children's achievement trajectories across kindergarten and first grade", *Journal of Educational Psychology*, Vol. 101/4, pp. 912-925.
- Danish Ministry for Children and Social Affairs (2016), *Denmark Country Background Report on Transitions*, Ministry for Children and Social Affairs, Copenhagen, www.oecd.org/edu/school/SS5-country-background-report-denmark.pdf.
- Duncan G.J., et al. (2007), "School readiness and later achievement", *Developmental Psychology*, Vol. 43/6, pp. 1428-1446.
- Ebbeck, M., et al. (2013), "Children's Voices: Providing Continuity in Transition Experiences in Singapore", *Early Childhood Education Journal*, Vol. 41/4, pp. 291-298.
- Education Act (2010), 2010:800 (Skollag), www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfatningssamling/Skollag-2010800_sfs-2010-800/.
- Education Scotland (2016), Curriculum for Excellence a Statement on Practitioners, Education Scotland, Edinburgh, www.education.gov.scot/Documents/cfe-statement.pdf.
- Finnish Ministry of Education and Culture (2016), *Finland Country Background Report on Transitions from ECEC to Primary School*, Department for General Education and Early Childhood Education, Helsinki, www.oecd.org/edu/school/SS5-country-background-report-finland.pdf.
- Fukkink, R. (2011), "Prettiger in een goed pedagogisch klimaat" [Developing and feeling better in good pedagogical climate], *Management Kinderopvang*, Vol. 11/4, pp. 12-14.
- Geiser, K.E., I.M. Horwitz and A. Gerstein (2013), *Improving the Quality and Continuity of Practice across Early Childhood Education and Elementary Community School Settings*, Research brief, John W. Gardner Center for Youth and Their Communities Stanford Graduate School of Education, Stanford, California.
- Government of Japan (2016), *Japan Country Background Report on Transitions*, Government of Japan, Tokyo, www.oecd.org/edu/school/SS5-country-background-report-japan.pdf.
- Hamre, B.K., et al. (2012), "Enhancing teacher's intentional use of effective interactions with children. Designing and testing professional development interventions", in R.C. Pianta and W.S. Barnett (Eds.), *Handbook of Early Childhood Education*, pp. 507-529, Guilford Press, New York.

- Hattie, J. (2009), *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*, Routledge, London.
- Hattie, J. (2005), "The paradox of reducing class size and improving learning outcomes", *International Journal of Educational Research*, Vol. 43/6, pp. 387-425.
- Hedges, H. and M. Cooper (2015), "Engaging with holistic curriculum outcomes: deconstructing 'working theories'", *International Journal of Early Years Education*, Vol. 22/4, pp. 395-408.
- Howes C., et al. (2008), "Ready to learn? Children's pre-academic achievement in pre-Kindergarten programs", *Early Childhood Research Quarterly*, Vol. 23/1, pp. 27-50.
- Iacovou, M. (2002), "Class size in the early years: is smaller really better?" *Education Economics*, Vol. 10/3, pp. 261-290.
- Jindal-Snape, D. (2010), "Towards effective pre-school to primary transitions", Powerpoint presentation, University of Dundee, School of Education, Social Work and Community Education, Dundee, www.dundee.ac.uk/eswce/staff/djindalsnape.php.
- JSC IAC (Joint Stock Company Information-Analytic Center) (2017), *Kazakhstan Country Background Report on Transitions from ECEC to Primary School*, JSC "Information-Analytic Center", Astana, www.oecd.org/edu/school/SS5-country-background-report-kazakhstan.pdf.
- Kagan, S.L., et al. (2006), "Alignment: a missing link in early childhood transitions?", *Young Children*, Vol. 61/5, pp. 26-32.
- Karila, K. and L. Rantavuori (2014), "Discourses at the boundary spaces: developing a fluent transition from pre-school to school", *Early Years*, Vol. 34/4, pp. 377-391.
- Kunnskapsdepartementet (2008), *Veileder. Fra eldst til yngst*. [National guide. From the eldest to the youngest], Kunnskapsdepartementet, Oslo, www.regjeringen.no/globalassets/upload/kd/vedlegg/barnehager/veileder/f-4248-fra-eldst-til-yngst.pdf.
- La Paro, K.M., S.E. Rimm-Kaufman and R.C. Pianta (2006), "Kindergarten to 1st grade: Classroom characteristics and the stability and change of children's classroom experiences", *Journal of Research in Childhood Education*, Vol. 21/2, pp. 189-202.
- La Paro, K.M., A.C. Williamson and B. Hatfield (2014), "Assessing quality in toddler classrooms using the CLASS-Toddler and the ITERS-R", *Early Education and Development*, Vol. 25/6, pp. 875-893.
- Lerkkanen, M.-K., et al. (2016), "Child-centered versus teacher-directed teaching practices: Associations with the development of academic skills in the first grade at school", *Early Childhood Research Quarterly*, Vol. 36/3, pp. 145-156.
- Lerkkanen, M.-K., et al. (2012), "The role of teaching practices in the development of children's interest in reading and mathematics in kindergarten", *Contemporary Educational Psychology*, Vol. 37/4, pp. 266-279.
- Li, H., R. Nirmala and S.K. Tse (2012), "Adapting western pedagogies for Chinese literacy instruction: case studies of Hong Kong, Shenzhen, and Singapore pre-schools", *Early Education and Development*, Vol. 23/4, pp. 603-621.
- Lillejord, S., et al. (2017), *Transition from kindergarten to school – A systematic review*, Knowledge Center for Education, Oslo.
- Litjens, I. and M. Taguma (2010), *Literature Overview for the 7th Meeting of the OECD Network on Early Childhood Education and Care*, OECD, Paris.

- LoCasale-Crouch, J., et al (2008), "Pre-kindergarten teachers' use of transition practices and children's adjustment to kindergarten", *Early Childhood Research Quarterly*, Vol. 23/1, pp. 124-139.
- Magnuson, K., C. Ruhm and J. Waldfogel (2007), "The persistence of pre-school effects: Do subsequent classroom experiences matter?", *Early Childhood Research Quarterly*, Vol. 22/1, pp. 18-38.
- Margetts, K. (2007), "Preparing children for school-benefits and privileges", *Australian Journal of Early Childhood*, Vol. 32, pp. 43-50.
- Mashburn, A.J., et al. (2008), "Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills", *Child Development*, Vol. 79/3, pp. 732-749.
- Miller, D. and J. Almon (2009), *Crisis in the Kindergarten: Why children need to play in school*, The Alliance for Childhood, College Park, Maryland.
- Ministry of Education (2013), *A Meta-Perspective on the Evaluation of Full-Day Kindergarten during the First Two Years of Implementation*, Ministry of Education, Government of Ontario, www.edu.gov.on.ca/kindergarten/FDKReport2013.pdf.
- Ministry of Education, Science and Sport of the Republic of Slovenia (2017), *Slovenia Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education, Science and Sport, Ljubljana, www.oecd.org/edu/school/SS5-country-background-report-slovenia.pdf.
- Moss, P. (2013), "The relationship between early childhood and compulsory education: a properly political question", in P. Moss (Ed.), *Early childhood and compulsory education: Reconceptualising the relationship*, pp. 2-50, Routledge, London.
- Mustola, M., et al. (2016), "Reconsidering passivity and activity in children's digital play", *New Media & Society*, OnlineFirst.
- Neuman, M.J. (2002), "The wider context", in H. Fabian and A.-W. Dunlop (Eds.), *Transitions in the Early Years*, pp. 8-22, Routledge, London.
- NAE (National Agency for Education)(2014a), *Övergångar inom och mellan skolor och skolformer* [Transitions within and between schools], National Agency for Education (Skolverket), Stockholm, www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpbext%2Ftrycksak%2FRecord%3Fk%3D3355.
- NIEER (2007), "Pre-school curriculum decision-making: dimensions to consider", Policy Brief, National Institute for Early Education Research, New Jersey.
- Norwegian Directorate for Education and Training (2017), *Norway Country Background Report on Transitions from ECEC to Primary School*, Norwegian Directorate for Education and Training, Oslo, www.oecd.org/edu/school/SS5-country-background-report-norway.pdf.
- OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, <http://dx.doi.org/10.1787/eag-2016-en>.
- OECD (2015a), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264233515-en>.
- OECD (2015b), *Improving Schools in Scotland: An OECD Perspective*, OECD Publishing, Paris, www.oecd.org/education/school/Improving-Schools-in-Scotland-An-OECD-Perspective.pdf.
- OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264228368-en>.

- O’Kane, M. (2016), *Transition from Preschool to Primary school: Research Report 19*, Report Prepared for the National Council for Curriculum and Assessment, Dublin.
- O’Kane, M. and R. Murphy (2016a), *Transition from preschool to primary school: Audit of policy in 14 jurisdictions*, Report Prepared for the National Council for Curriculum and Assessment, Dublin.
- O’Kane, M. and R. Murphy (2016b), *Transition from Preschool to Primary School in Ireland: Audit of Transfer Documentation in Ireland*, Report Prepared for the National Council for Curriculum and Assessment, Dublin.
- Palmer, G. (2015), “Curricula in early childhood care and education”, in P.T.M. Marope and Y. Kaga (Eds.), *Investing Against Evidence: The global state of early childhood care and education*, pp. 249-267, UNESCO Publishing, Paris.
- Peters, S. (2004), “Crossing the border: An interpretive study of children making the transition to school”, unpublished PhD thesis, University of Waikato, New Zealand.
- Phillips, G., S. McNaughton and S. MacDonald (2004), “Managing the mismatch: Enhancing early literacy progress for children with diverse language and cultural identities in mainstream urban schools in New Zealand”, *Journal of Educational Psychology*, Vol. 96/2, pp. 309-323.
- Pianta, R.C. (2004), “Transitioning to school: Policy, practice, and reality”, *The Evaluation Exchange*, Vol. 10/2, pp. 5-6.
- Rambøll (2010), *Kartlegging av det pedagogiske innholdet i skoleforberedende aktiviteter i barnehager* [Mapping of the Pedagogical Content in School-Preparatory Activities in Kindergartens], Rambøll Management Consulting.
- Rimm-Kaufman, S. E. and R.C. Pianta (2000), “An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research”, *Journal of Applied Developmental Psychology*, Vol. 21, pp. 491-511.
- Sammons, P. (2010), “Does pre-school make a difference? Identifying the impact of pre-school on children’s cognitive and social behavioural development at different ages”, in K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart (Eds.), *Early childhood matters: evidence from the effective pre-school and primary education project*, pp. 92-113, Routledge, London.
- Sammons, P., et al. (2004), “The impact of pre-school on young children’s cognitive attainments at entry to reception”, *British Educational Research Journal*, Vol. 30/5, pp. 691-712.
- Scottish Government (2014), *Building the Ambition: National Practice Guidance on Early Learning and Childcare Children and Young People (Scotland) Act 2014*, Scottish Government, Edinburgh, www.gov.scot/Resource/0045/00458455.pdf.
- Sink, C.A., C.N. Edwards and S.J. Weir (2007), “Helping children transition from kindergarten to first grade”, *Professional School Counselling*, Vol. 10/3, pp. 233-237.
- Siraj-Blatchford, I. (2010), “A focus on pedagogy: Case studies of effective practice”, in K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart (Eds.), *Early Childhood Matters: Evidence from the effective pre-school and primary education project*, pp. 149-165, Routledge, London.
- Slot, P., et al. (2016), *Multiple Case Study in Seven European Countries Regarding Culture-Sensitive Classroom Quality Assessment*, WP2.3 Curriculum and quality analysis impact review, CARE, Report, http://ecec-care.org/fileadmin/careproject/Publications/reports/CARE_WP2_D2_3_Multiple_Case_study_FINAL_REPORT.pdf.
- SOU (2015), *Mer tid för kunskap – förskoleklass, förlängd skolplikt och louskola* [More time for knowledge - preschool class, extended compulsory schooling and holiday school], Slutbetänkande av Grundskoleutredningen.

- Sproule, L., et al. (2005), *The Early Years Enriched Curriculum Evaluation Project EYECEP*. Final Report Phase 1 (End of Fourth Year), Queens University, Belfast.
- Stephen, C. (2006), *Early Years Education: Perspectives from a review of the international literature*, Information and Analytical Services Division, Scottish Executive Education Department, Victoria Quay, Edinburgh.
- Stephen, C. and P. Cope (2003), "An inclusive perspective on transition to primary school", *European Educational Research Journal*, Vol.2/2, pp., 262-276.
- Stipek, D., et al. (2017), "PK-3: What does it mean for instruction?" *Social Policy Report*, Vol. 30/2, pp. 1-23.
- Stipek, D. J. and P. Byler (2005), *The Early Childhood Classroom Observation Measure*, Coding manual, electronically from authors, 2005.
- Stipek, D. J. and P. Byler, P. (2004), "The early childhood classroom observation measure", *Early Childhood Research Quarterly*, Vol. 19/3, pp. 375-397.
- Stipek, D., et al. (1995), "Effects of different instructional approaches on young children's achievement and motivation", *Child Development*, Vol. 66/1, pp. 209-223.
- Schweinhart, L. J. and D.P. Weikart (1988), "Education for young children living in poverty: Child-initiated learning or teacher-directed instruction?", *Elementary School Journal*, Vol. 89/2, pp. 213-225.
- Swedish Ministry of Education and Research (2017), *Sweden Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education and Research, Stockholm,
www.oecd.org/edu/school/SS5-country-background-report-sweden.pdf.
- Sylva, K., et al. (2004), "The Effective Provision of Pre-school Education (EPPE) Project: findings from pre-school to end of Key Stage 1", Research Brief, Institute of Education, London,
<http://eppe.ioe.ac.uk/eppe/eppepdfs/RBTec1223sept0412.pdf>.
- Sylva, K., K. Erek-Stevens and A.-M. Aricescu (2015), *Overview of European ECEC curricula and curriculum template*, WP2.1 Curriculum and quality analysis impact review, CARE, Report,
http://ecec-care.org/fileadmin/careproject/Publications/reports/CARE_WP2_D2_1_European_ECEC_Curricula_and_Curriculum_Template.pdf.
- Tarrant, K. and S. Kagan (2010), "Integrating pedagogy, practice, and policy: A transition agenda", in S. Kagan and K. Tarrant (Eds), *Transitions for Young Children: Creating connections across early childhood systems*, pp. 313-326, Brookes, Baltimore, Maryland.
- Uibu, K., E. Kikas and K. Tropp (2011), "Instructional approaches: differences between kindergarten and primary school teachers", *Compare: A Journal of Comparative and International Education*, Vol. 41/1, pp. 91-111.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2015), *Incheon Declaration for Education 2030*, UNESCO, Paris, <http://unesdoc.unesco.org/images/0023/002338/233813m.pdf>.
- UNESCO (2007), *Strong Foundations: Early Childhood Education and Care*, EFA Global Monitoring Report, UNESCO, Paris.
- Vandell, D.L., et al. (2010), "Do effects of early child care extend to age 15 years? Results from the NICHD study of early child care and youth development", *Child Development*, Vol. 81/ 3, pp. 737-756.
- Vygotsky, L. V. (1978), *Mind and society: the development of higher psychological processes*, Harvard University Press, Cambridge.
- Walsh, G.M, et al. (2010), "Implementing a play-based and developmentally appropriate curriculum in Northern Ireland primary schools: what lessons have we learned?", *Early Years*, Vol. 30/1, pp. 53-66.

- Welsh Government (2017), Wales Country Background Report on Transitions from ECEC to Primary School, Welsh Government, Cardiff, www.oecd.org/edu/school/SS5-country-background-report-wales.pdf.
- Winters, D.L., C.H. Saylor and C.Y. Phillips (2003), "Full-day kindergarten: A story of successful adoption and initial implementation", *Young Children*, Vol. 58/6, pp. 54-58.
- Wood, E. (2005), "Developing play in the curriculum", in E. Wood and J. Attfield (Eds.), *Play, Learning and the Early Childhood Curriculum*, Sage, London.
- Wood, E. and N. Bennet (2001), "Early childhood teachers' theories of progression and continuity", *International Journal of Early Years Education*, Vol. 9/3, pp. 229-243.
- Yan, W. and Q. Lin (2005), "Effects of class size and length of day on kindergartners' academic achievement: Findings from early childhood longitudinal study", *Early Education and Development*, Vol. 16/1, pp. 49-68.
- Zvoch, K. (2009), "A Longitudinal Examination of the Academic Year and Summer Learning Rates of Full- and Half-Day Kindergartners", *Journal of Education for Students Placed at Risk*, Vol. 14/4, pp. 311-333.

Chapter 5

Developmental continuity in transitions from early childhood education and care to primary school

To ensure continuity in young children's development, high-quality ECEC needs to be followed by quality education throughout school, and particularly during the first years of primary education. Collaboration is the watchword for developmental continuity, and is explored here for a range of actors involved in child development, including children themselves, their parents, ECEC and primary school staff, and community services. The chapter draws on a survey of OECD countries and partner countries to outline key trends across jurisdictions, as well as similarities and differences. It describes five main challenges highlighted by participating countries that are hindering developmental continuity, along with a wealth of practical strategies for tackling them. It concludes with some pointers for policy development as food for thought for countries seeking to improve developmental continuity in transitions.

The data collected through the OECD questionnaire on transitions for Italy is published here under the responsibility of the National Institute of Evaluation of the Educational and Training System (INVALSI, Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione).

Key policy messages

Developmental continuity is improving, but gaps remain. Research tells us that:

- Strong collaboration among all actors involved in children's early development is key for successful transitions: these include children, parents, ECEC and primary school teachers and professionals of community services. Such collaboration helps children develop a sense of belonging and connectedness to school.
- Children's views need to be included when preparing transitions: relationships (maintaining and making new friends), acquiring learning competencies and knowing about school rules are perceived by children as the most important elements for a positive transfer to primary school.
- The use of transition practices, such as visits to primary school, help children to better adapt to a new learning environment. Furthermore, the number and type of transition activities that children and parents engaged in are positively associated with children's academic and socio-emotional development.
- Parental involvement in learning before, during and after transition is essential for development and continuity, especially for children from disadvantaged backgrounds. Children with involved parents tend to do better in reading and numeracy, have positive social and emotional social skills, and be more motivated to learn.
- Children tend to transition better when ECEC centres and schools work together with parents. The most effective settings in promoting children's learning are those where there is a high level of parental involvement; where child-related information is shared between parents and staff; and where parents participate in defining children's learning programmes.

International comparisons reveal some clear trends

- In 93% of countries, children are being prepared for the transition to primary school through activities in the final year of ECEC. Of the eight most common activities (open-house days, parental information meetings, taster days, materials for parents, specific information materials for children, exchange days, support from specialists and home visits), countries offer five on average, with the most popular being visits to the primary school (93%); parent information meetings (89%); and taster days at primary schools (85%).
- Most countries (74%) offer special needs children specialist support (e.g. from psychologists or social care workers) during or after transitions. The important role of community services in ensuring developmental continuity in transitions is recognised in the majority of countries.
- Countries vary in how they include children's views in transition preparations: while some jurisdictions recognise the importance of children's participation in their curriculum frameworks and/or education acts (e.g. Denmark, Finland, Norway, Sweden and Wales (United Kingdom)), others involve children in research (e.g. Finland and Sweden). In practice, children's involvement differs across municipalities, ECEC settings and schools.
- Collaboration among teachers takes several forms: including school and ECEC exchanges, sharing information on child development, and forming collaborative professional learning groups as platforms to exchange ideas and practices across sectors.
- Staff-parent collaboration is likely to be higher in preschool than in primary school. For example, sharing child development information is much more prevalent in preschool than in primary school (93% and 70%, respectively).

Countries have a wealth of strategies to address developmental continuity challenges

Challenge 1. Children's views on transitions are not fully accounted for when shaping policies and practices for transitions

- Strategy: Specify in education acts or curricula children's rights to participate, e.g. in Norway, this is explicit in both the Education Act and Framework Plan. Kindergarten teachers are trained to see children's interests and use them in pedagogical situations in everyday life.
- Strategy: Conduct research involving children, e.g. in Finland, children's views and children themselves are increasingly included in research and as researchers.

...

Key policy messages (continued)

Challenge 2: Parents' lack of awareness of the importance of the transition process hinders their involvement

- Strategy: Develop and provide support materials for parents on transitions, e.g. Australia has a host of materials explaining what parents need to know to support their child's transition to school.
- Strategy: Offer multiple activities to increase parents' awareness and participation in transitions, e.g. in Finland, parents or guardians co-operate in organising ECEC teaching and pedagogies.

Challenge 3: Difficulties engaging parents from disadvantaged backgrounds in the transition

- Strategy: Adapt support materials to the needs of immigrant parents and children, e.g. Lower Austria provides parents with information on transitions in several languages (e.g. Bosnian/Croat/Serbian, Bulgarian, Czech, and Turkish).
- Strategy: Develop new participatory activities to involve parents, e.g. The HIPPY (Home Instruction for Parents of Preschool Youngsters) programme is implemented in Australia, Austria, the Netherlands and the United States. Parents are encouraged and empowered to create learning situations for their own children.
- Strategy: Complement transition activities with parenting programmes, e.g. Wales' Flying Start programme, which provides parenting support guidance.

Challenge 4: Unequal relationships between ECEC staff and primary school teachers

- Strategy: Develop initiatives to share child development information, e.g. Wales' Early Years Development and Assessment Framework.
- Strategy: Organise joint training for ECEC and primary school teachers e.g. in Austria, Japan and Denmark.
- Strategy: Create collaborative professional learning groups, e.g. the Netherlands "startgroepen".
- Strategy: Integrate both levels of education in the same location, e.g. Austria's campus model.

Challenge 5: Limited co-operation with community services

- Strategy: Establish working teams with professionals from different sectors, e.g. Austria has two types of working teams – the "transition team" and the "committees for transition".

Several policy pointers arise from this research

- Understand and enhance transitions through children's views: Accounting for children's views when planning transitions needs to be further advanced to ensure children's needs are at the core of transition policy making.
- Tackle parents' lack of awareness of transitions: A better understanding of the rationale, goals and tasks of the transition process can facilitate parental involvement in transition activities, which is core for ensuring developmental continuity.
- Tailor transition practices to fit parental needs: Efforts to reach out to parents, especially those from disadvantaged backgrounds, would be helped by adapting practices to parental needs and providing multiple opportunities for parents to participate.
- Build strong and equal partnerships between ECEC settings and schools, for instance through collaborative learning environments. This is key for continuity in children's learning experiences.

Introduction

Early child development and learning set the foundations for future learning, health and well-being. Children develop on a continuum, where new skills are formed based on skills that were formed at earlier stages (Heckman, 2000). The experiences and the relationships that children are exposed to during early childhood contribute not only to shaping the brain architecture, but also affect all aspects of their development – intellectual, social, emotional, behavioural and physical (National Scientific Council on the Developing Child, 2004). During the transition process, developmental continuity is supported when new learning experiences build upon children's developmental progress and their previous learning experiences (Peters, 2000).

While children experience a number of transitions over their life-times, the transition from the last year of ECEC to primary school is a critical one (see Box 5.1 for definitions). It has been argued that it is one of the most important moments in a child's life: setting "...the tone and direction of a child's school career" (Pianta and Kraft-Sayre, 1999; p.47).

Successful transitions require the participation of all actors involved in children's early development, including children, parents, ECEC staff, primary school teachers, the community and other services linked to ECEC and early development (e.g. health professionals, psychologists, social workers and before and after out-of-school services). Solid, responsive and reciprocal relationships among all these participants help ensure continuity for children when moving to a new learning environment (Chapter 4; Chapter 6; Lillejord et al., 2017). Collaboration among multiple actors, however, may be challenging as they may have different values and expectations; different ways of working; different competencies to prepare children during this period; and scarce time and resources to devote to transition activities (Lillejord et al., 2017; Broekhuizen et al., 2015; Arndt et al., 2013).

This chapter examines how the various actors involved in transitions from the last years of ECEC and the first year of primary school participate in enhancing children's developmental continuity. The chapter begins by summarising the literature on the importance of developmental continuity and collaboration in transitions. Although the evidence comes from studies and white papers published in countries with different contexts and different education systems, several commonalities can be found in terms of conclusions and challenges. The chapter then explores and compares what OECD and partner countries are doing to promote developmental continuity. It draws on in-depth country reports by 8 OECD¹ countries and 1 partner country (Kazakhstan), as well as a questionnaire completed by 27 OECD countries and 3 partner countries (Colombia, Croatia and Kazakhstan) in 2015/2016 (see Annex A for details on the methodology). The chapter then identifies five key challenges, along with a wealth of strategies countries have developed to address them. The chapter concludes with a selection of policy pointers to inform future policy discussions.

Box 5.1 Key definitions

Throughout this report the term **early childhood education and care** (ECEC) will be used to refer to regulated arrangements that provide education and care for children from birth to compulsory primary school age (in integrated systems), or from birth to pre-primary education (in **split systems**). The International Standard Classification of Education (ISCED) is the reference classification for categorising education programmes and related qualifications by education levels and fields. The latest version (ISCED 2011) has nine levels of education, from level 0 to level 8, where ISCED 0 refers to early childhood education and ISCED 1 refers to primary education. Education programmes at ISCED level 0 are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02). The latter include ECEC centres that provide services for children to support early development in preparation for participation in school and society, and that accommodate children from age three to the start of primary education. The focus of this publication is on ISCED 02 and the terms pre-primary, preschool and ECEC are used interchangeably.

Transitions are defined as a "change process" that children go through from one educational stage to another over time (Fabian and Dunlop, 2002). This can include horizontal and vertical transitions. Horizontal transitions involve children's transitions during their everyday lives between, for instance, a pre-primary education setting or primary school and an after-school centre. Vertical transitions refer to the transitions between different educational settings, such as between an ECEC setting and school (Kagan, 1991; Ackesjö, 2013). This chapter focuses on vertical transitions. See glossary.

Another term used in this chapter that needs to be clarified is "parents", which also extends to guardians and carers, whose important role is recognised in most studies and policies reviewed here. Here we use the terms "parents" and "family" to refer to this group.

For more information, see the Glossary; and OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, <http://dx.doi.org/10.1787/9789264228368-en>; UNESCO Institute for Statistics (2015), "ISCED mappings", <http://uis.unesco.org/en/isced-mappings>

What does the literature tell us about developmental continuity during transition from ECEC to primary school?

The first years of life lay down the foundations for children's future skills development and learning (Shonkoff and Phillips, 2000). Research in neuroscience shows that the brain sensitivity of highly important developmental areas – such as language and numeracy, social skills and emotional control – peaks in the first three years of life (Naudeau et al., 2011). The neural connections that are formed during this period are the basis upon which future learning depends (Center on the Developing Child, 2009). Strong foundations in the early years increase the chances of positive learning and development, while weak foundations are more likely to lead to struggles.

Well-prepared transitions can ensure a positive start in school, carrying forward the benefits from high-quality ECEC throughout the primary school period and beyond. However, badly-managed transitions risk undermining any positive effects from ECEC (OECD, 2006; AIHW, 2009). To ensure developmental continuity, high-quality ECEC needs to be followed by quality education throughout school, and particularly during the first years of primary education (Woesmann, 2008). Furthermore, continuity in learning needs to acknowledge the differences between sectors and build upon the strengths of each (Stipek et al., 2017).

The transition experience, as with any other learning experience, is shaped by multiple factors in the child's learning context (Dumont, Istance and Benavides, 2010). The involvement of and collaboration among parents, ECEC settings, primary schools and other early years' services are key for a positive influence on children's developmental continuity and transit to school (see Figure 6.1, Chapter 6; also Rimm-Kaufman and Pianta, 2000; Bronfenbrenner, 1994; Bronfenbrenner 1986). In line with the ecological and dynamic models of transitions, Ahtola et al. (2011a) conclude that the child must be surrounded by a "web of relationships" whereby all participants influence each other and each of them facilitates children's transitions between two different learning environments and, in turn, their continuity in learning and development (Lillejord et al., 2017; National Scientific Council on the Developing Child, 2004).

Solid relationships or partnerships among all actors involved in transitions help to build a strong foundation for primary school and for developing children's sense of belonging and connectedness to school. When responsibility is shared across actors, the transition to school is clearer and more predictable (Margetts, 2014). Thoroughly planned transition practices place the responsibility for transitions on all actors involved in children's education. These actors include parents, ECEC staff, primary school teachers, community services and children themselves.

For the child, the transition from the last year of ECEC to primary school is a period of excitement and pride as well as insecurity, anxiety and nervousness of the new and unfamiliar (Lillejord et al., 2017). Most children tend to navigate the transition process smoothly, but some children struggle, experiencing problems such as restlessness and anxiety (Lillejord et al., 2017; Jindal-Snape, 2010). Research shows that particular groups of children struggle more when starting primary school. For instance, children with an immigrant background tend to have more difficulties than their native peers, and boys tend to experience more school adjustment difficulties than girls (Hausken and Rathburn, 2002; Sylva et al., 2004). Differences in developmental outcomes by gender and socio-economic background begin early in life and before children start primary school (Feinstein, 2003; Bradbury et al., 2011; Sylva et al., 2004) – hence the important role of parents, ECEC staff and school teachers in identifying the individual support needs of children before, during and after the transition.

The transition experience is sensitive to individual differences and unique for each child. Transition practices that take into account the individual characteristics of the child and the kind of learning environments where she/he has been in previous years help to increase the chances of a successful transition (Peters, 2010). Successful transitions are associated with: a strong and positive sense of identity and belonging (how much children feel valued and supported, and connected with

the school environment and to others); positive attitudes and dispositions towards school learning; feeling competent and capable; positive relationships with pedagogical staff and peers; and liking school, among others (Appelqvist-Schmidlechner et al., 2016; Nolan et al., 2009). All participants in the transition process should ensure that socio-emotional competencies are promoted during the transition process to school. These competencies can be beneficial for developmental continuity, for better coping during transitions and for progressing through school (Margetts, 2014; Fitzpatrick and Pagani, 2012; Dunlop and Fabian, 2006).

Children's views need to be accounted for when preparing transitions

Since the turn of the century, children's views are increasingly being taken into account for shaping their own transition and learning. This approach stems from the Convention on the Rights of the Child (1989), as well as from research highlighting the importance of children's active participation in pedagogies and education (Hilppö et al., 2016; Ebbeck, et al., 2013; Lippinen, Kumpulainen and Hilppö, 2013; Einarsdóttir , 2007; Bandura et al., 2001). Behind these notions lies the view of children as an active agent in their own life (Strandell, 2010; Lippinen et al., 2013). Research in Finland, for example, suggests that children's role as agents in the context of transition is key for developing children's competencies and capabilities. If children are active participants in aspects that matter in their life, they can commit more deeply to the activities required (Lippinen et al., 2013).

Similarly, Ackesjö (2013) argues that understanding children's perspectives on how they experience the transition is essential for developing suitable transition practices. When transitions are based on children's perspectives, interests, motives and questions, they contribute to making the transition transparent and to giving children and parents a sense of continuity and agency. Furthermore, children's views and concerns may differ from those of parents and teachers (Docket and Perry, 2003). Hence, listening to children talk about their expectations (when they are in preschool) and their experience (when they are in primary school) helps to better understand the challenges they face; and helps to improve the support that parents and pedagogical staff in ECEC settings and schools can provide.

One of the most recurrent findings from studies listening to children's voices is the importance of making the transition with friends, which enables children to like school, and to reduce anxiety and nervousness when entering the new learning environment (Margetts, 2007). A study in Finland, for example, finds that for preschool children, peer relations – maintaining and making new friends – is one of the most important elements for a positive transfer to primary school; followed by children's beliefs and expectations of learning (Eskelä-Haapanen et al., 2016). Similarly, Huf's (2013) comparative ethnographic study from England and Germany highlights the importance of starting school with former peers for strengthening children's sense of agency (i.e. the degree to which children are allowed to make choices and decisions on matters related to their own learning experience). In England, where children remained with their peers in the same group, children were better able to establish their new role and to actively contribute to their new learning environment than their German peers, who were split and placed in different groups at school entry.

A qualitative study involving children in Australia showed that there are a number of factors that children regard as important to know before they start school (Margetts, 2009; Margetts, 2013). These include: affective and social relationships (knowing how to make friends and having someone to rely on); pre-academic skills (knowing how to learn and knowledge of literacy and numeracy); school rules and school procedures (knowing what is appropriate and inappropriate behaviour and knowing what to do); classroom procedures (knowing what the classroom is like and how to behave); and feelings (knowing how to feel good and how to avoid feeling scared). By understanding and facilitating experiences that allow children to learn about these issues and having realistic expectations of what will happen at school, parents and teachers can help children have a smoother and happier start at school.

Parental involvement facilitates the transition to primary school

Parental involvement in children's learning and development begins at birth, by providing guidance, developing habits, imparting values, supporting learning experiences and sharing expectations. In addition, supportive relationships that generate healthy attachments positively affect children's understanding and regulation of emotions as well as their feelings of security and tastes for exploration and learning (OECD, 2015a). The Programme for International Student Assessment (PISA) and many other studies show that children whose parents engage in activities such as reading, writing words, telling stories and singing songs not only tend to better in reading and numeracy skills, but are also more motivated to learn (Scottish Government, 2016; Van Voorhis et al., 2013; OECD, 2012; Sylva et al., 2003).

Some of the most robust evidence for the importance of parental involvement for child development comes from longitudinal studies such as the Effective Provision of Preschool Education study (EPPE; Sylva et al., 2003). This study examined the quality of the home learning environment on preschoolers' development using a range of parental activities (e.g. reading with the child, teaching songs and nursery rhymes, painting and drawing, playing with letters and numbers, visiting the library, teaching the alphabet and numbers, taking children on visits and creating regular opportunities for them to play with their friends at home). Results suggest that parental involvement in children's learning was more important than parental education, occupation or income for the child's cognitive and socio-emotional development (Sylva et al., 2003). The EPPE report concludes that "What parents do is more important than who they are" (Siraj-Blachford et al., 2008, p. 25). Research shows, however, that while parental involvement reduces the negative effects of disadvantage on children's early learning and well-being, it cannot fully eliminate them (Hango, 2005; Kiernan and Huerta, 2008).

Families play a particularly important role in shaping children's learning and development during infancy and early childhood. During the transition stage to primary school, parents play a critical role in supporting children's developmental continuity (McWayne et al., 2012). An affectionate and supportive parent-child relationship leads to smoother schooling transitions, higher academic achievement and fewer behavioural difficulties (Pianta et al., 1997; Pianta and Harbers, 1996). This period is an opportunity for parents to identify children's difficulties and provide the support needed to get off to a stronger start at primary school (Lillejord et al., 2017). This is particularly true for children lagging behind in their socio-emotional development (Malsch et al., 2011) or for children from disadvantaged households (Margot, 2007).

Numerous factors, however, affect the extent to which parents engage in transition activities and in children's education in general. These include children's age, parents' socio-economic characteristics, parent's marital status, language, and attitudes to and expectations of education (OECD, 2001). An important barrier is the time parents devote to other activities, including employment. Parental employment may limit their involvement as it decreases the quantity and quality of time they can spend with their children (Huerta et al., 2014; Waldfogel, 2006). Children from disadvantaged households tend to have less parental engagement because parents or carers may work long and/or unusual hours (weekends and night shifts); may not speak the language spoken at the ECEC setting or school; and/or may be so stressed by financial constraints that they lack the energy needed to engage in child-related activities.

The intensity and frequency of the transition activities targeted towards parents might also matter for developmental continuity. "High-intensity" transition activities for parents are those that involve personal contact with ECEC and/or primary-school teachers before the child transits to primary school (Little et al., 2016). These activities may include parents attending an orientation session prior to the school year; teachers visiting children's homes at the beginning of the school year; parents meeting with the preschool teacher, etc. By contrast, "low-intensity" activities are less

personal. They may include sending information home after or before school starts, hosting an open house, or parents and children visiting the primary school prior to the start of the school year (Little et al., 2016; Schulting et al. 2005). Evidence from the United States shows that “high-intensity” activities are more effective and beneficial, but they tend to be less common in high-poverty areas where they are most needed (Schulting et al., 2005).

Additionally, research shows that the number of transition activities that parents participate in is positively associated with academic and socio-emotional gains in the first year of primary school, even after controlling for factors such as socio-economic status (Margetts 2007; 2003; Puccioni, 2015; Schulting et al., 2005). The effect is stronger for children from lower-income households, suggesting that transition activities moderate the negative association between disadvantage and child learning outcomes (Schulting et al., 2005). It is worth noting that it is possible that these results are driven by parental engagement in children’s learning more than by participation in these activities. This is because parents who are engaged in children’s education are likely to participate most in transition activities.

Engaging parents in the transition process not only helps to improve children’s preparedness for school (Margetts, 2003), it also helps parents feel more engaged with the ECEC and school community and more aware of support and resources available (Van Voorhis et al., 2013). It thus contributes to increasing parental participation in primary school (Schulting et al., 2005; 2008).²

Parental engagement is, however, often encouraged more in preschool than in primary school (Stipek et al., 2017). Parents who have been involved in preschool activities need to be given opportunities to continue engaging in children’s school-related activities when in primary school. If parent-staff collaborations weaken when children transit to primary school, parental engagement in children’s school-related activities is likely to decrease, which in turn may negatively affect children’s learning experiences (Stipek et al., 2017). Hence, continuity in parent-staff collaborations when children transit to primary school is also important.

Collaboration between parents and staff is key for a successful transition

Parents are a critical partner of ECEC settings and schools as they help provide continuity to children’s learning when they move to primary school (Peters, 2010; Dunlop and Fabian, 2006). The transition from ECEC to primary school is an optimal moment to establish a positive relationship between parents and staff both in ECEC and primary-school settings (Peters, 2010). Strong and supportive relationships among these actors are key for a successful transition (Docket and Perry, 2009). Furthermore, the quality of these relationships during the transition period can foster developmental continuity in learning as children move vertically and horizontally across levels and settings (Bohan-Baker and Little, 2002). It can also facilitate continuity in parental involvement when children start school (Schulting et al., 2005; 2008).

Parents together with preschool and primary school teachers are part of the transition experience of the child, and as such they should regularly monitor children’s development and well-being and should ensure the child receives the support needed during the transition process (Lillejord et al., 2017). A strong collaboration with parents enables them to support children at home with activities that complement those being conducted in preschool or school. Fisher (2009) emphasises the importance of dialogue among teachers, children and parents to collaborate as these exchanges allow the different expectations of these groups to be recognised.

Staff and parents cannot assume that adjustment to school is organic and unproblematic, even when the child seems to adjust easily to the new environment (Ackesjö, 2013). During the transition process, children may experience stress which can bring about changes in their behaviour, including regressive behaviours such as thumb sucking and bed wetting (Hirst et al., 2011). It is important that

parents are informed of these possible behaviours. Raising awareness of these potential difficulties may allow parents and teachers to identify children that require additional support and to provide it before behavioural problems lead to struggles.

ECEC staff and primary school teachers should share with parents and children the reason and purpose of the transition activities, explain the difficulties children may experience during this process and provide practical information and advice. Evidence shows that transition programmes that provide relevant information to parents on the process help build parents' self-efficacy in managing this experience (Hirst et al., 2011). This can include for example: information on how to support their child in preparing for school; the common behaviours and challenges that children experience during transition; and whether the child is coping well during the transition or if they need additional support (Hirst et al., 2011).

Evidence from the Head Start programme³ in the United States corroborates the importance of school collaboration with parents. This programme prepares parents and their children for entry into school (kindergarten in the United States) in three ways: 1) sharing information with parents about differences and similarities; 2) providing emotional support for children, including visits to the school's playgrounds and classrooms; and, 3) empowering parents as advocates for their children and enabling them to participate in school activities. A qualitative study with parents, ECEC staff and first year primary-school teachers revealed that parents value these initiatives and find them helpful in supporting children during the transition (Malsch et al., 2011). Another study showed that these collaborations helped improve early literacy success in children by encouraging home literacy practices for both English-speaking and English-learners (Zaslow et al., 2004).

Similarly, findings from the EPPE study show that children tend to do better in ECEC centres that work together with parents (Sylva et al., 2004). The most effective settings in promoting children's learning are those where there is a high level of parental involvement with the ECEC centre activities (Sylva et al., 2003 and 2004); where child-related information is shared between parents and staff; and where parents participate in defining children's learning programmes (Huser et al., 2016; Lillejord et al., 2017; Hirst et al., 2011).

One obstacle for collaboration between parents and teachers is when they have different ideas and expectations of learning and development, and of school readiness (Arndt et al., 2013). Parents, in general, hold high expectations for children's pre-academic learning, perceiving it to be a precondition for a smooth transition and a positive school adjustment. The CARE project (Curriculum and Quality Analysis and Impact Review of European Early Childhood Education and Care) found that parents in all participating countries⁴ thought that fostering social and emotional skills (e.g. interpersonal skills, emotional regulation and personal learning attitudes) together with pre-academic skills were important developmental goals for young children (Broekhuizen et al., 2015). Furthermore, this study suggests that parents allocate increasing importance to all learning and developmental goals as children grow older, especially goals related to pre-academic skills. There are, however, differences in expectations among parents. For instance, immigrant parents tend to give greater importance to pre-academic goals than non-immigrant parents (Broekhuizen et al., 2015).

On the other hand, staff in both ECEC and primary schools tend to have a more holistic approach to learning, though with some nuances: primary school teachers consider pre-academic skills to be a learning area of high importance, while ECEC staff consider pre-academic skills of lower importance than socio-emotional development (Arndt et al., 2013; Lillejord et al., 2017). Other evidence points to a misalignment in preschool and primary school teachers' beliefs regarding the importance of the set of skills needed at school entry (Abry et al., 2015). Research shows that exposure to this misalignment is negatively associated with children's school adjustment (Abry et al., 2015).

Differences in teachers' and parents' beliefs and expectations are likely to vary depending on the context, with teachers likely to be influenced by their experiences during pre-service training, by their practice in the classroom and by educational policy (Abry et al., 2015). For example, countries such as France, the United Kingdom and the United States place a stronger emphasis on "readiness for school", even at pre-primary level, as opposed to the Nordic countries, which emphasise life preparation in a broader sense (see Chapter 6).

The relationship between parents and preschool and primary school teachers is not always straightforward or egalitarian. Some studies have observed that the views of pedagogical staff tend to dominate those of parents (Lillejord et al., 2017). The relationship may be especially unbalanced and difficult for parents who have feelings of distrust or inadequacy; who themselves had poor school experiences; or who believe that schools hold conflicting cultural values to their own (Arnold et al., 2006; Lillejord et al., 2017; Turunen, 2012). This can be especially true for parents from disadvantaged backgrounds.

Collaboration between ECEC and primary school is another important precondition for successful transitions

Strong collaboration across ECEC settings or between ECEC centres and primary school can also help children and families better navigate the transition to school, as we have seen in previous chapters. When the school builds upon and improves what the children have already learned in early childhood education and care, it contributes to continuity in their learning experiences (Lillejord et al., 2017; see Chapter 4). An Australian study found that children who experience similar environments in different settings, such as an ECEC setting and school, are likely to find the transition to school, as well as school in general, easier (Dockett and Perry, 2001). This means that collaborative measures are needed that connect the last period of ECEC with the school start (Lillejord et al., 2017).

Several differences between ECEC and primary schools may act as barriers to the collaboration between staff in the two institutions. These differences include not only different educational practices and learning environments (see Chapter 4), but also different attitudes, expectations, qualifications, resources and working conditions (see Chapter 3). These gaps are likely to differ across countries, with less integrated and decentralised systems having greater risks of fragmentation and poor alignment, making co-operation across sectors and across settings more challenging (see Chapter 2).

One impact of these differences can be unequal relationships between the two levels of education, which explains in great part the tensions between pedagogical staff and the difficulty in establishing fruitful collaborations (Lillejord et al., 2017). Several studies have concluded that schools' views and practices tend to dominate the collaboration between ECEC settings and schools (Lillejord et al., 2017) (see Chapter 4). The influence of school on preschool practice has been observed in previous studies, with ECEC staff expressing concerns about pressure to adopt the teaching methods of primary school (Peters 2000; see also the literature review in Chapter 4). Docket and Perry (2014), on the other hand, observed that in Australia staff in both institutions believe their practices are the best and most important to implement. Such imbalances in the relationship pose challenges to co-operation between the two sectors.

Pedagogical collaboration on curriculum issues, teaching practices and sharing child development information between ECEC and school settings has been positively associated with children's later academic skills, as evidence from Finland shows (Ahtola et al., 2011b) (see Chapter 4).⁵ Close communication about children's previous experiences and learning contributes to easing children's stress and school adjustment; to better tailoring transition activities; and to

identifying children in need of additional support (Lillejord et al., 2017). Likewise, evidence from a multistate study in the United States found that when preschool teachers shared information about curricula or specific children, children developed positive social competencies and fewer negative behavioural problems (LoCasale-Crouch et al., 2008).⁶

Professional collaboration is challenging, however. A Norwegian case study emphasises that for it to be fruitful, it requires a common understanding of goals and aims, as well as respect for the other's expertise, background, practices and institutional cultures (Lillejord et al., 2017). It concludes that communication is crucial and that staff from both sectors need to learn about their counterparts' practices so that the collaboration is based on knowledge and not on prejudices (Lillejord et al., 2016). Initiatives from both educational levels can lead to more equal relationships and to a "professional learning community" (Boyle and Petriwskyj, 2014) (see Chapter 3).

Strong communication between education sectors also allows for the exchange of other information that can ease children's transitions to school. For example, good communication between staff across sectors can ensure the child has a friend in the same class upon school entry – an element that can have a positive impact on children's developmental continuity and well-being. This option, however, may be difficult to implement, especially in jurisdictions without an integrated system. Structural differences across systems may or may not permit this kind of collaborative practice.

Collaboration with other child-focused and community services

Young children's development is not only influenced by the input of parents, ECEC settings and schools, but also by other members of the community. Therefore, it is important that different services – ECEC settings, health services, out-of-school services – work together and create a "continuum of services" that is reassuring for parents and can meet the needs of young children (OECD, 2011).

Other members of the community – including integrated early years services and health professionals – can also support the transition from ECEC to school. Children may struggle more when starting school and with learning if they have health issues (e.g. hearing or visual problems). The support of health professionals is therefore particularly important for these children. Similarly, early years' services programmes (e.g. Flying Start in Wales (United Kingdom) or the Head Start in the United States) are key for providing integrated services to disadvantaged families (e.g. health visiting services, language support, parenting programmes). The existence of this collaboration and involvement during the transition process is, however, less well documented in the literature.

The involvement of wider community services (e.g. health or social services and sport organisations) or community members in ECEC plays an important role in the development of young children. Community support for the early development process is considered as one of the characteristics common to high-quality ECEC centres (Henderson et al., 2002). If the connection between schools and communities is strong, it is easier for children to develop the skills needed to be successful socially and emotionally, physically and academically (Edwards et al., 2008, Oakes and Lipton, 2007; OECD, 2006).

Moreover, a continuum between ECEC services, parents, neighbours and other civil society stakeholders can enhance co-operation among different services, leading to a comprehensive services approach (OECD, 2015b). Comprehensive services are more responsive to what children actually need in terms of their overall development and to what parents need in terms of childcare, health care and other opportunities. A strong comprehensive system of community and formal ECEC services empowers disadvantaged families.

Research gaps remain

The growing political interest in transitions has led to increased research on this topic. However, there are still important gaps in the knowledge about practices that enhance children's developmental continuity. First, there is little information about how many children experience a successful transition to school and how many experience difficulties and why. Second, there is a need for more rigorous studies that shed light into what kind of transition activities are most effective in supporting children's continuity in learning and adjustment to school. Third, an area with limited evidence is the kind of transition programmes that are most effective in supporting children and parents from disadvantaged backgrounds. Fourth, more research is needed to better understand the kind of collaborations that work and that promote positive outcomes for children, parents and staff. For instance, little is known about how child development information is shared and used by the key actors involved in transitions. Fifth, there is still a need for further research from the child and parents' perspective on their transition experiences. Finally, more research is needed into the most effective type of collaboration with child-related community services for supporting a healthy transition to school.

To what extent are countries ensuring developmental continuity?

This section looks at how collaborations on transitions between different actors are organised in participating jurisdictions. It explores the policies and practices implemented by participating jurisdictions to prepare children for transitions and to involve children in shaping their own transition experience. It also compares the different approaches used by countries to encourage parental involvement in transitions and collaboration between ECEC settings and primary schools. The section ends with a review of the practices used to promote the involvement of other child-related community services in providing additional or special support to transition activities. The information for this section is mainly drawn from the 9 country background reports and a questionnaire completed by 27 OECD countries and 3 partner countries (Colombia, Croatia and Kazakhstan) in 2015/2016 (see Annex A for details on the methodology).

Nearly all jurisdictions have specific activities to prepare children for transitions

The OECD survey on transitions asked countries about their provision of eight common activities to prepare parents and children for primary school (see Figure 5.1). The list of activities is not exhaustive but represents the most common practices. Of the 28 countries who responded, all but two (Mexico and Ireland) prepare children for transitions with specific activities or lessons. The most common activities are open-house days (visits to primary schools) (93%), parent information meetings (89%) and taster days, where ECEC children participate in primary school activities for one or more days (85%). Several countries reported offering support for transitions from specialists, mainly for children with special learning needs (e.g. Austria, most jurisdictions in Canada, Finland, Germany, Luxembourg, New Zealand, Sweden and Switzerland).

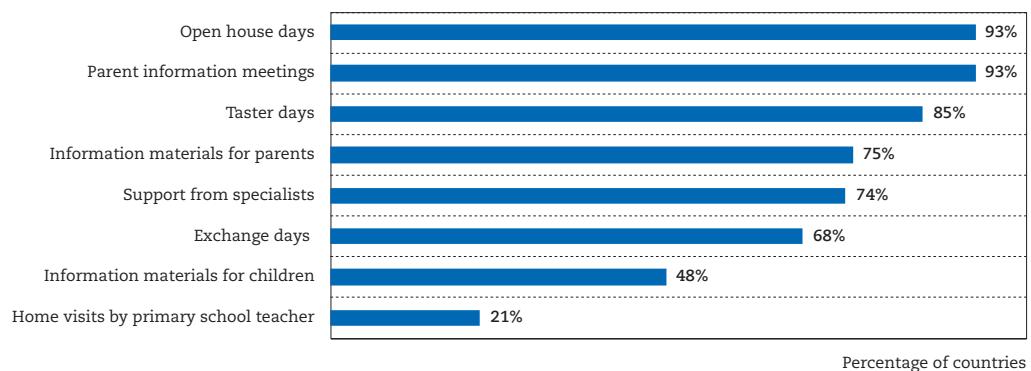
Other transition activities are less common, such as providing specific information materials for children (e.g. books, booklets, TV programmes or videos designed for children) (48%) and home visits by future primary school teachers (21%). Such activities are generally only offered in specific circumstances. For example, in Canada home visits can be planned for children or families who live in rural or remote areas, or for children who have additional support needs (e.g. a physical, cognitive, neurodevelopmental, or learning disability or behavioural and/or emotional needs).

The transition activities presented above provide an overall picture of the common practices offered in participating countries. As most settings have discretion in deciding what practices they implement, it is likely that provision and practices will vary across regions, municipalities and settings. Furthermore, countries are likely to have practices that were not included in the survey.

The nine countries that provided detailed background notes (see above and in Annex A) report a number of activities to prepare children during the transition stage. These, however, vary in their timing, intensity and focus. In Austria, children are exposed to several activities to familiarise them with the school learning environment. These include mutual visits by teachers and/or children, and joint projects and activities like celebrations, sport events, singing, acting or project days. In Denmark, some of the common ways to prepare children for school are visits to the school, special organised activities for children during their last year in ECEC, and conversations with parents. In Finland, parents also visit schools during the last year before primary school, although these visits are not frequent or intense (Danish Ministry for Children and Social Affairs, 2016). Depending on local stakeholders, children can visit the school the day before the school year starts, and possibly meet the teacher beforehand.

Figure 5.1 Open house days and parent information meetings are the most common method for preparing children for transitions

Common practices in transition preparation for children and/or parents from the last year in ECEC to primary school



Notes: Information on transition activities is based on 28 countries.

Data by country can be found in Annex 5.A, Table 5.A.1.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495687>

In Sweden, the curriculum does not include specific practices for preparing preschool children for the transition to compulsory school. Nevertheless, a number of preparatory activities are possible. Localities may have action plans designed as a transition cycle that indicate when (point of time), what (which activity) and who is responsible for transition practices (e.g., preschool teachers, compulsory school teachers, head-teachers, teacher for special needs). For example, in May, the preschool teachers and the primary school teachers together organise a visit to the preschool class (Swedish Ministry of Education and Research, 2017).

A common practice to prepare children for the transition to primary schools, not shown in the figure above, is language development support. Support and stimulation of children's language development has gained particular attention in recent years in a number of OECD countries (e.g. Austria, Denmark, Finland, Norway, Slovenia, Sweden, Wales (United Kingdom), Canada, Germany, Luxembourg and the Netherlands), some of which participated in this study (for examples see Box 5.2). A proficient understanding and use of the language of instruction and of children's mother tongues are considered necessary to learn, to develop a personal identity and to ensure a good start in school. In Sweden, for instance, great importance is given to language development and the Education Act stipulates that preschools should work on developing both Swedish and children's mother tongues (Swedish Ministry of Education and Research, 2017).

Box 5.2 Special support for children's language development: Examples from Germany and the Netherlands

In **Germany**, the support and stimulation of children's language development has gained particular attention in recent years. Language development programmes are not explicitly aligned with the transition from ECEC to primary school, however a proficient understanding and use of the language of instruction (German, but also in children's other mother tongues) is considered a precondition for a good start in school. It is argued that oral language skills acquired in ECEC may serve as a basis to promote literacy competencies in preschool. Growing awareness of the needs of children from immigrant backgrounds has led to the introduction of language assessment/screening schemes in 14 of the 16 German Länder. These assessments are usually conducted 24-12 months before children's transition to school.

Support for other mother tongues besides German is only provided within individual projects or on the initiative of ECEC staff/centres/providers. Currently, the most common practice to enhance children's skills in German is the child-oriented approach "Alltagsintegrierte Sprachliche Bildung" (i.e. language education embedded into daily routines). This approach was spread nationwide through the federal programme "Frühe Chancen: Schwerpunkt-Kitas Sprache und Integration" [Language day nurseries: because language is the key to the world], and continued through the follow-up programme: "Sprach-Kitas: Weil Sprache der Schlüssel zur Welt ist" [Early Chances: Childcare centers with special focus on language and integration].

In the **Netherlands**, support for children's language development (Dutch) is also of growing importance. Implementation of language development activities started in 2009, and by 2012 the budget allocated to such activities had been increased further in larger municipalities. The same language curriculum prevails across ECEC and primary school, adapted to the different ages. This facilitates transitions and helps children be better prepared for entering school. Young children are entitled to receive language development support, especially those from disadvantaged backgrounds. These children can participate in ECEC-targeted programmes (*vooren vroegschoolse educaties, vve* for short), which provide support before and during the first years of school. The "vve" contain special programmes aimed at language development. All toddlers (2.5 to 4 years old) who are part of the "vve" programme receive 10 hours of language development per week. The rest of the day targeted toddlers attend the same ECEC programme as their non-targeted peers.

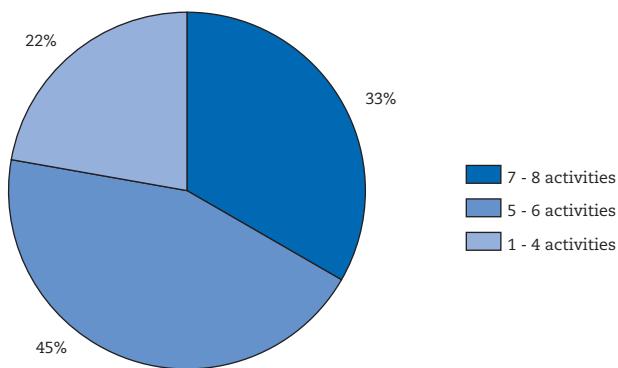
Findings from the Pre-COOL national cohort study show that this approach works (Akgündüz and Heijnen, 2016; Leseman et al., 2017). Participating in daycare centres and preschools decreases the early gap in language and executive function skills (measured by a selective-sustained attention test) for children from disadvantaged backgrounds. Disadvantaged children who participate in daycare centres and preschools implementing "vve" programmes show even more enhanced language and executive function development than similar children who participated in centres and preschools without "vve". Social-emotional development has not yet been examined. The findings regarding children's work attitude as evaluated by teachers show a remaining gap for children of low-educated parents and an increasing gap for children of immigration background compared to other children. The effects on language and executive function are directly related to working with an education programme, through its focus on language instruction. There were also indirect effects, as working with such a programme was related to higher observed educational process quality, and to a higher teacher-reported frequency of guided play and pre-mathematical activities in the classroom, which in turn significantly predicted language and executive function development (Leseman et al., 2017).

Sources: <http://sprach-kitas.fruhe-chancen.de/programm/ueber-das-programm>; Akgündüz, Y. and S.M.M. Heijnen (2016), "Impact of funding targeted preschool interventions on school readiness: evidence from the Netherlands", CPB Discussion Paper 328, www.cpb.nl/sites/default/files/publicaties/download/cpb-discussion-paper-328-impact-funding-targeted-preschool-interventions-school-readiness.pdf; Leseman, P. et al. (2017), "Effectiveness of Dutch targeted preschool education policy for disadvantaged children: Evidence from the pre-COOL study", in Blossfeld, H-P., et al. (eds), *Childcare, Early Education and Social Inequality: An International Perspective*.

The number of transition activities offered to parents and children indicates the level of policy development and commitment to transition. Figure 5.2 shows that the majority of countries offer several transition activities for parents and children, with the most common number being five out of a list of eight. One-third of countries reported providing seven to eight different transition activities, while 45% offer five to six. Germany, the Netherlands and the Slovak Republic all offer eight transition activities.⁷ On the other hand, Greece, Ireland and Mexico offer fewer than three (see also Table 5.A.1 in the chapter annex). Once again, it is possible that there is wide variation within countries on the actual number of activities offered as implementation is up to the autonomy/

discretion of municipalities and staff in the ECEC centres and schools. Nevertheless, Figure 5.2 paints a positive picture, showing that most countries have a rich set of activities to prepare children and parents for the transit to primary school, which research suggests is essential for children's positive learning experiences.

Figure 5.2 Most countries have multiple activities to prepare children and parents for primary school



Notes: Information on transition activities is based on 27 countries. Countries with more than one missing value in transition activities were not considered here. These include: Chile, Italy and Japan.

Data by country can be found in Annex 5A, Table 5.A.1.

Countries with 7-8 transition practices: Canada, Czech Republic, Finland, Germany, Netherlands, Poland, Slovak Republic, Spain, Turkey.

Countries with 5-6 transition practices: Austria, Croatia, Denmark, Hungary, Kazakhstan, Luxembourg, New Zealand, Portugal, Slovenia, Sweden, Switzerland, Wales (United Kingdom).

Countries with 1-4 transition practices: Belgium (Flemish community), Colombia, Greece, Ireland, Mexico, Norway.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495699>

Countries vary in how they include children's views in transition preparations

Research shows that preparing transition activities with the participation of children helps ensure children better understand and take ownership of their own transition. Understanding children's views is important for identifying their expectations, experiences and needs (Margetts, 2014). Participating countries increasingly view children as active participants in their own transition and learning. However, the extent to which children's views are taken into account in shaping policies and practices is difficult to tell.

Some countries recognise the importance of children's participation in their curriculum frameworks (e.g. Denmark, Norway and Wales (United Kingdom)) and/or in their education acts (e.g. Finland, Norway and Sweden) (Table 5.1). By doing so, local authorities, ECEC facilities and schools are also obliged to consider children's views when developing their transition programmes. For example, in Norway, the Kindergarten Act states that "Children in kindergartens shall have the right to express their views on the day-to-day activities of the kindergarten. Children shall regularly be given the opportunity to take active part in planning and assessing the activities of the kindergarten. The children's views shall be given due weight according to their age and maturity. The right to participate applies to all years of ECEC and not only to the final year" (Norwegian Directorate for Education and Training, 2017).

In Finland, the ECEC Act includes regulations for the participation of children and parents. The goals, tasks and working approaches are discussed with the child and her/his guardian when children move into pre-primary education and to primary school. The aim is to familiarise children and parents with the learning environments, activities and personnel of the new setting before teaching begins. These practices are implemented at the municipality level and not at the national level. The importance of children's views is also mentioned widely in the curriculum, but not specifically linked to transitions.

Additionally, Finnish children are involved in shaping transitions through the increasing use of inclusive research methods to capture children's perspectives (Finnish Ministry of Education and Culture, 2016).

The Swedish Education Act specifies that the interests of the child shall be a primary consideration at all education levels. In Wales (United Kingdom), collaboration with the child is an essential part of the pedagogical principles of the Foundation Phase framework. These countries underscore that children's views should be taken into account in all matters that concern them, including the development of policies and practices around transitions.

Austria and Denmark organise activities to involve children in the transition process. For example, Austria has organised staff-child conversations, known as "reflection talks". During these conversations, children express their expectations for the transition process and for primary school. In Denmark, there are multiple activities to gather children's views and feedback, including through dialogue between ECEC staff and parents. Both the Austrian and the Danish approach allow staff to understand how to best prepare children for school and how to ensure a smooth learning path. However, these exchanges are not widespread, and vary across settings.

The fact that some countries' education acts and curricula recognise the important role of accounting for children's views does not necessarily mean that children participate in shaping practices. While the Nordic countries have a strong emphasis on children's participation, guided either by their curriculum or their education acts, they do not standardise how children's participation should be implemented. Likewise, other participating countries lack national standards for encouraging or accounting for children's views during transition (Table 5.1). In general, children's involvement differs across municipalities, ECEC settings and schools, irrespective of whether there are national standards or not.

Equally, the staff-child conversations generally aim at informing children about the transition process, rather than involving them in planning and implementation. This was noted in Slovenia, for example, in interviews with experts and senior personnel of the National Education Institute. Although preschool teachers have conversations with children about what will happen during the transition to school, this does not ensure that teachers take into account children's views and opinions on the preparation for school (Ministry of Education, Science and Sport of the Republic of Slovenia, 2017). In addition, a study conducted in Norwegian ECEC settings in 2010 revealed that although children participated in planning, carrying out and evaluating school preparatory activities, they were less involved in research or in giving their views for shaping practices (Norwegian Directorate for Education and Training, 2017). Japan mentions that children have the opportunity to learn about primary school peers and teachers through organised exchanges, but it is not clear whether they are involved in planning transition activities (Government of Japan, 2016).

Table 5.1 Is the importance of children's views mentioned in education acts and curricula?

	Education acts	Curricula
Austria	No	No
Denmark	No	Yes
Finland	Yes	Yes
Japan	No	No
Kazakhstan	No	No
Norway	Yes	Yes
Slovenia	No	Yes
Sweden	Yes	No
Wales (UK)	No	Yes

Note: This table refers to education acts and curricula in either preschool or primary school education. In countries where both type of acts or curricula exist, the table makes no distinction.

Source: OECD country background reports on transitions, 2016 and 2017.

Collaboration with parents is guided by policy in most countries

Research suggests that strong, trustful and respectful collaboration between parents and ECEC settings and schools can help ensure a smooth transition to school by co-developing children's competencies and learning dispositions. Most countries have programmes or activities to encourage parents to get involved in children's development. These activities can begin during the early years right after the child is born; when the child makes his or her first transition from the home environment to the ECEC setting; and when the child transitions to primary education.

Several participating countries take a long-term approach to parental involvement. Austria, for example, takes an early, continuous and long-term approach towards collaboration with the home environment. Engagement with parents starts from the moment the child is born, when parents receive information on public support measures and ECEC services. The transition from home to ECEC is considered by the curriculum framework to be the first transition to occur. At this stage, parents receive information to guide their involvement.⁸ When the child is in ECEC, parents are informed on the transition from ECEC to primary school through online resources and various brochures (in Vienna, these materials are multilingual and include versions in English, Serbian, Bosnian, Croatian and Turkish). Furthermore, parents of five-year-olds are contacted individually to provide them with information on the last mandatory year of ECEC (kindergarten). Efforts to involve parents in children's education continue into primary education. The curriculum for this level recommends that parents participate in the arrangement of school activities and exchanging of information is explicitly encouraged.

In Norway, *Forskrift om rammeplan for barnehagens innhold og oppgaver* [The Framework Plan for the Content of Tasks of Kindergarten], clearly states that kindergartens should, in collaboration with schools, facilitate children's transition to school in co-operation with parents. In Denmark, the act governing daycare facilities also promotes this collaboration with parents. Further, the ECEC system and the Folkeskole (public schools) are committed to collaborating with parents from the beginning of ECEC and until the child is in ninth or tenth grade. In Finland, informal discussions with parents/guardians take place in ECEC, when children transition from one ECEC group to another within the same ECEC setting. These discussions may involve consulting parents on whether the child is mature enough to be transferred to the next group. However, official discussions with the child and parents begin when the child moves to pre-primary education and they mainly concentrate on the topic of transitions. Parent-staff conversations continue when the child moves to primary education. The aim is for children and parents to have an opportunity to familiarise themselves with the goals, learning environments, activities and working approaches of pre-primary and primary education (grades 1 and 2) before beginning formal learning.

In Australia, the free Learning Potential mobile app and website (www.learningpotential.gov.au) have been developed to help parents engage with their children's education from birth to high school. The app and website contain articles and informative videos, tips and suggestions to help parents become more involved in their children's education. Learning Potential provides parents and carers with practical tips and information on how to make the most of their time with their children to support their learning and development – including information on how to help children with the transition to school.⁹

The importance of working with parents to support children's learning and development is underscored in national guidelines or curriculum frameworks in all participating countries, except Finland and Japan (Table 5.2). In general, these documents provide recommendations to support staff, but they do not provide indications of specific practices. One such country is Norway, where the curriculum framework and a national guide (Kunnskapsdepartementet, 2008) emphasise that parents must be well informed on legal, practical, structural and content matters relating to school. However, they do not specify how parents should be involved. In Denmark, parents have a legislative right to form parent associations with both ECEC and school.

Table 5.2 Is parental involvement in transitions mentioned in education acts and curricula?

	Education acts	Curricula
Austria	Yes	Yes
Denmark	No	Yes
Finland	No	No
Japan	No	No
Kazakhstan	Yes	Yes
Norway	No	Yes
Slovenia	Yes	Yes
Sweden	Yes	No
Wales (UK)	No	Yes

Source: OECD country background reports on transitions, 2016 and 2017..

Similarly, in Austria, Finland, Slovenia, Sweden and Kazakhstan, collaboration between parents and teachers is emphasised in their curricula (Table 5.3; see also Table 4.A.7 in the annex to Chapter 4 for details of all the curricula). In Austria, the curriculum for primary schools¹⁰ recommends that teachers and parents consult each other, that parents and teachers exchange relevant information, and that parents participate in the arrangement of school activities (Charlotte Bühler Institut, 2016). In Finland, the national core curriculum makes specific reference to co-operation with parents in transition phases and mandates the municipalities to plan and describe the co-operation practices in their local curriculum (Finnish Ministry of Education and Culture, 2016). In Slovenia, co-operation with parents is specified in the Kindergarten Curriculum and in the kindergarten annual work plan. In Sweden, both the curriculum for preschool (Lpfö 98) and the curriculum for the compulsory school, the preschool class and the recreation centre (Lgr 11), stress the importance of preparing guardians for transitions and indicate that the head teacher is responsible for ensuring co-operation between the school and the home, especially if the child experiences problems and difficulties (Swedish Ministry of Education and Research, 2017). In Kazakhstan, parental engagement is laid out in the curriculum for pre-primary education (“Biz mektepke baramyz”) and in the Education Act. The latter stipulates that parents are responsible to ensure the school readiness of their child (JSC IAC, 2017).

The German ECEC curricula makes suggestions for the collaboration of staff and parents to support transition, which Länder may decide to adapt (e.g. the Saxonian Curriculum refers to collaboration with parents). However, as in most countries, these guidelines are not mandatory.

Table 5.3 Is collaboration between parents and staff on transitions mentioned in education acts and curricula?

	Education acts	Curricula
Austria	No	Yes
Denmark	No	No
Finland	Yes	Yes
Japan	No	No
Kazakhstan	No	Yes
Norway	No	Yes
Slovenia	Yes	Yes
Sweden	Yes	Yes
Wales (UK)	No	No

Source: OECD country background reports on transitions, 2016 and 2017.

There is a variety of activities for involving parents in the transition stage. Common activities across countries are listed below (several are also designed to prepare children for the transition and have already been discussed in the context of Figure 5.1 above):

- parent information meetings with pedagogical staff in ECEC and primary school

- information such as documents, videos and brochures distributed in preschools and schools and available online
- collaborative joint events between ECEC centres and schools, partly organised by parents and children
- home visits by the future primary school teacher
- transition planning, including writing child development information, such as a biography about a child's likes and dislikes, strengths and weaknesses
- collaboration with parents of children with special education needs.

Parent information meetings are one of the most common practices, reported by 89% of jurisdictions (Figure 5.1). During these meetings, ECEC centres or schools explain what happens at school, what children are learning, how and whether the child is making progress, and how parents can help. In Austria, for example, ECEC centres and schools have special days, known as "becoming acquainted" days, for informing new parents about the school. In Finland, there are parent-occasions at the start of the school year and other regular meetings, especially during the first school year. In Slovenia, parental involvement takes place mainly through informative meetings for parents (at least one or two meetings with parents whose children attend the final year before school) and through individual consultations with the preschool pedagogical staff. Additionally, the school may organise meetings and other activities for the parents of the future pupils (these activities are left to the autonomy of the institution).

Information materials for parents and children on how to prepare for the start of primary education are available in the majority of countries that answered the survey (75% for parents and 48% for children) (see Figure 5.1). This information tends to describe the school's goals, working methods and rules. These materials also provide advice and tips on how to prepare children for the transition. For example, Finland has produced a number of brochures and "welcome" information materials for parents and children who are about to start school. In Slovenia, primary schools have to provide information to parents through materials available in print at the school and through the school's website. This must include information about the school, the programme, the organisation of the school work in accordance with the Annual Work Plan, the rights and duties of pupils, house rules and other information.

Collaborative events between ECEC centres and schools are organised in most countries. Japan has various initiatives to deepen the understanding of parents and guardians about transitions. For instance, individual boards of education, schools and facilities organise joint events to explain about the significance of transition. In these collaborative events, parents and guardians may exchange opinions with other parents from primary schools; or they can observe joint kindergarten-primary school lessons. In addition, parents receive information about school life and learning programmes in primary schools. In Finland, parents can attend the first hours of the first-school day (doors are always open). And in Slovenia, parents and children visit schools to meet the teachers and other future first-year pupils and parents.

In Denmark, according to the Danish Act on Daycare Facilities, ECEC settings must co-operate with parents to ensure a good transition to school by developing and supporting basic skills and a desire to learn. Furthermore, daycare facilities must co-operate with schools to create a coherent transition to school. However, the daycare facilities act does not specify how the co-operation must be done, and it is therefore up to the council or the local municipality to decide how to secure a good transition. As a result, many different practices exist.

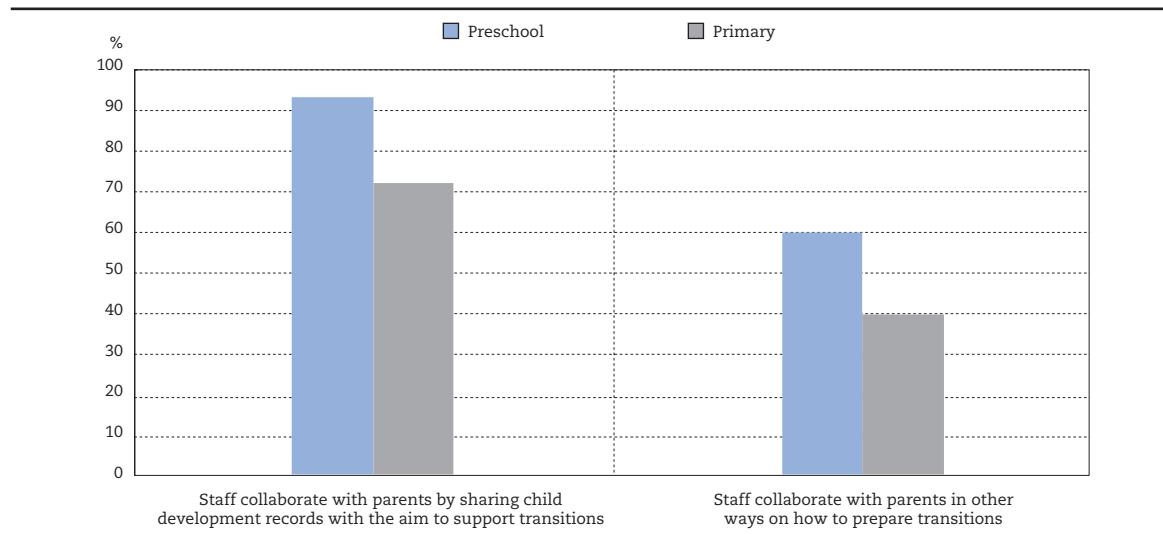
In Sweden, it is common for the child, parents and first grade teachers to meet before school starts. However, there is no national regulation on this, or on whether staff should share child

development information – although this is often done. National regulations only state that staff should collaborate with parents over child development.

Figure 5.3 compares the share of jurisdictions that have staff-parent collaboration in pre-primary and primary education. The figure clearly shows more collaboration at pre-primary level than at primary. While more than 90% of jurisdictions reported that ECEC staff collaborate with parents by sharing information on child development information, only 71% of jurisdictions do so in primary schools. For other types of staff-parent collaboration (e.g. parent information meetings, providing information on transitions, home visits among others), the gap between pre-primary and primary schools was similar. Around 60% of jurisdictions reported engaging in these other types of staff collaboration with parents in pre-primary education, compared to around 40% in primary education (Figure 5.3). These numbers suggest that staff-parent collaboration, which is key for parental involvement, decreases as children transit to primary school.

Figure 5.3 Staff-parent transition collaboration is more common in ECEC settings than in primary school

Percentage of jurisdictions where staff collaborate with parents



Notes: Information on staff-parent collaboration is based on 27 countries for preschool and 28 countries for primary school. Data by country can be found in Annex 5.A, Table 5.A.2.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495703>

Another country where both ECEC and primary school staff collaborate on a regular basis with parents is Poland. Before the transition period, individual and group meetings with parents are held frequently to discuss various aspects including child transition. According to the Regulation by the Ministry of National Education, the preschool teacher is responsible for continuous observation of the child and for keeping up-to-date records which aim at identifying children's developmental needs. This information helps the teacher with her/his daily work and with co-operating with the child's parents. Likewise, this information provides the basis for co-operation with specialists offering psychological, educational and medical support. Moreover, the core curriculum for preschool education obliges teachers of six-year-olds enrolled in preschool to carry out an assessment of each child's readiness for school (preschool diagnosis). This assessment takes place in the school year preceding the child's enrollment in grade 1 of primary school. The results of the initial assessment are passed to the child's parents. On the basis of the initial assessment the teacher prepares an individual support plan related to the child's development. In sum, staff – in co-operation with parents and specialists – help prepare the child for primary school.

Children with special learning needs receive specialist transition support in most countries

For children with special learning needs, including speaking another language at home, the transition might be more daunting. Research shows that children with language acquisition difficulties are more likely to fail to learn how to read in primary education, regardless of the teaching method (Laloux, 2012). Working with parents as early as the first years of preschool education and through the transition to primary education can improve children's outcomes, including their reading capacity. Moreover, making efforts with parents to narrow language difficulties for non-native children can create trust and can foster a closer relationship with parents and communities.

The OECD survey on transitions indicates that the majority of countries (74%) who completed the survey (20 out of 27) provide children with support from specialists (e.g. psychologists or social care workers) during or after transitions (Figure 5.1). However, for most countries this support is especially or exclusively for children with special needs. This is the case for Austria, Canada (Box 5.3), Finland, Germany, Luxembourg, New Zealand,¹¹ Sweden and Wales (United Kingdom).

The nine countries that provided in-depth information on transitions also report organising special activities for parents of children with special needs. This includes translating information for parents of non-native children who need specially adapted language education (e.g. Austria, Norway, Wales (United Kingdom), as well as organising targeted activities (e.g. Wales (United Kingdom)). In Slovenia, for example, the involvement of parents of children with special needs is stipulated in the Placement of Children with Special Needs Act. Parents participate in expert team meetings to discuss the development of their child, and they actively contribute to planning the transition to school. In addition, special projects for the Roma community are implemented in order to establish links and create trust between kindergartens/schools and Roma families. These projects include hiring Roma assistants and offering diverse activities in the settings (e.g. workshops, visits of Roma children to the afternoon groups in kindergarten). The education of Roma children is guided by a strategy adopted in 2004 and amended in 2011.

In Austria, the issue of inclusion has received increasing attention in recent years. Austria's approach aims to promote ways of thinking and acting that take into account the needs and interests of others and that simultaneously value differences between children and their talents. Collective and individual learning lie at its centre (Biewer, 2009). This inclusive approach is firmly anchored in the National Framework Curriculum. Legal regulations provide for the possibility of integrated teaching of disadvantaged and non-disadvantaged children in primary schools (and in lower secondary schools and in the lower level of secondary academic schools).

Box 5.3 Case study: Supporting the transition of children with special needs in Canada

Some Canadian jurisdictions provide resources and specialist support to facilitate transitions for children with special needs. A common tool is an individual education/programme/support services plan (the name varies between provinces and territories). This individual plan is a supporting document developed through a consultative process involving children, parents, school/programme staff, and other professionals. It provides detailed information about each specific child's learning and developmental needs (e.g. actions, strategies, and accommodations). This document is intended to guide teachers, ECE pedagogical staff, support staff, and families in providing all children with opportunities for success.

Specific examples include Alberta's *Learning Team Handbook for Parents of Children with Special Needs*; Newfoundland and Labrador's *Childcare Services Inclusion of Children with Special Needs Policy Manual*; Saskatchewan's *Childcare Inclusion Program*; Manitoba's *Protocol for Early Childhood Transition to School for Children with Additional Support Needs [Protocole pour l'entrée à l'école des jeunes enfants ayant besoin de soutien additionnel]*; and Quebec's *Services éducatifs aux élèves à risqué et aux élèves handicaps ou en difficulté d'adaption ou d'apprentissage [Educational Services for At-Risk Students and Students With Handicaps, Social Maladjustments or Learning Difficulties] (EHDAA)*.¹²

Sources: Information provided by the Canadian Government and edited by OECD.

In the Netherlands, ECEC settings with “vve” targeted programmes for disadvantaged children emphasise collaboration with parents (Box 5.2). The legislation governing the “vve” programmes stipulates that collaboration with parents is part of the programmes. Staff receive specific in-service training for these programmes, which includes how to collaborate with and provide support to parents. The Ministry of Education has drawn up agreements with the 37 largest municipalities about their “vve” efforts and goals, including efforts to collaborate with parents on supporting disadvantaged children during the transition stage. A recent study shows that because of extra funding to these municipalities, transitions between ECEC and school have significantly improved (see Box 5.2). In addition, the number of boys in the first years of primary education who have to repeat a school year has significantly decreased, indicating that these activities are helping boys become more ready for school during their ECEC years (Akgunduz and Heijnen, 2016).

In several countries, children with special learning needs receive support for the transition to school through community services (discussed further below).

Collaboration among teachers takes several forms

What staff do during transitions and how they collaborate across institutions is key for how children cope during transitions. ECEC staff and primary school teachers need to support children with carefully planned transition activities that should be conducted in close collaboration between staff of the two educational levels. Both sectors are responsible for helping the children understand and feel safe in the new context (Lillejord et al., 2017).

All participating jurisdictions have guidelines in their curriculum or national guides emphasising the importance of collaboration across sectors (Table 5.4). The Austrian curriculum framework, for example, states that the teachers of all involved institutions should provide opportunities for the integration of the two systems. Similarly, in Sweden both the curriculum for the preschool (Lpfö 98) and the curriculum for compulsory school, preschool class and recreation centres (Lgr 11) strongly highlight the need for co-operation (NAE, 2014a). Japan’s “National Curriculum of Day Care Centres” also states that active co-operation with primary schools should be promoted. In Slovenia, the Kindergarten Curriculum (*Kurikulum za vrtce*) stipulates the principle of continuity (vertical connectedness) between kindergarten (preschool) and basic school (integrated primary and lower-secondary education).

The Norwegian national guide on transitions states that the single most defining factor for successful co-operation is that teachers in kindergarten and school prioritise co-operation and meet to plan the transition. Further, *The Framework Plan for the Content and Tasks of Kindergartens* clearly states that kindergartens should, in collaboration with schools and parents, facilitate children’s transition to school. At primary school, transitions are less of a topic, however. They are mentioned only generally in Norway’s Quality Framework for schools, which states that good and systematic co-operation between daycare institutions and primary education, primary education and lower secondary education, and lower secondary education and upper secondary education eases the transition from one education stage to the next in the course of one’s education.

Legislation in the Netherlands obliges municipalities to draw up agreements on children’s developmental continuity when transitioning from ECEC to primary education. This means that the municipality is responsible for all children experiencing a smooth transit from ECEC to school, a so-called “warm transition”.

Most participating jurisdictions have a diverse set of strategies to ensure collaboration on transitions between ECEC and primary schools. These include developing guidelines, developing the curriculum (see Chapter 4), organising meetings, sharing knowledge, exchanging information about the development of individual children, developing support materials, and organising joint activities (e.g. joint celebrations).

Table 5.4 Is collaboration between ECEC and primary school mentioned in education acts and curricula?

	Education acts	Curricula
Austria	No	Yes
Denmark	No	Yes
Finland	No	Yes
Japan	No	Yes
Kazakhstan	Yes	No
Norway	No	Yes
Slovenia	Yes	Yes
Sweden	Yes	No
Wales (UK)	No	Yes

Source: OECD country background reports on transitions, 2016.

The *Brückenjahr* project in Germany¹³ and the *Transition Statement* project in Australia highlight the importance of relationships between both sectors (see Box 5.4). What is more, they perceive this co-operation as a priority for achieving successful transitions (Huser et al., 2016). Similarly, Austria reports that most interviewees in their network project (see Box 5.5) identify co-operation between ECEC and primary school as one of the relevant factors for successful interventions (Charlotte Bühler Institut, 2016).

Collaboration between both education levels, however, is not straightforward – in part due to governance issues (see Chapter 2). ECEC centres and primary schools have traditionally been considered as separate entities in many OECD countries, often operating under different ministries. Differences in laws, lack of time and resources, and too many feeder institutions are some of the blocking points to improving this type of co-operation across sectors (Dumčius et al., 2014). There is a general perception that further efforts are needed to strengthen collaboration (Bennet, 2013).

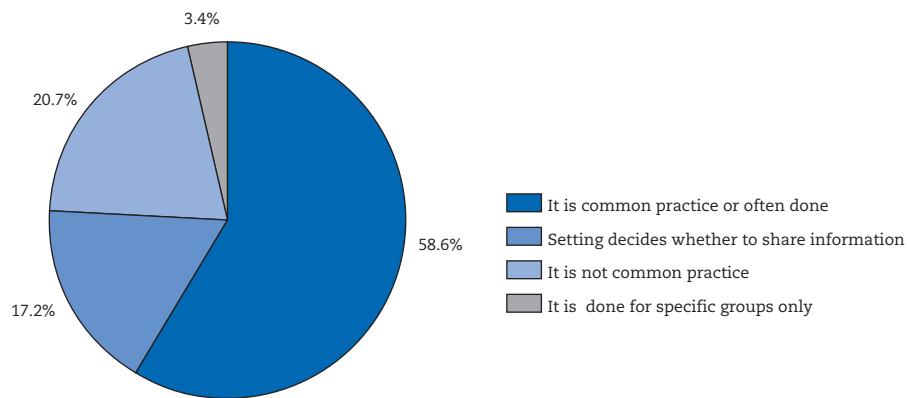
In Austria, for example, a recent study showed that 45% of teachers reported that collaboration was not sufficient between kindergarten and schools. In Norway, on the other hand, developmental continuity is considered to co-exist with the fact that ECEC (kindergarten) settings and primary schools have different characteristics (Lillejord et al., 2017). It is recognised that working on the transition process requires creating measures that acknowledge the differences and build on the strengths of each setting. A national survey in Norway reported that in the large majority of ECEC centres (kindergartens), co-operation between the two sectors is pursued: 76% of kindergartens have established common meeting points for pedagogical staff in kindergarten and school; and 94% have routines in place for co-operating on support for children with special needs (Norwegian Directorate for Education and Training , 2017).

Sharing child development information is common in most jurisdictions

Sharing child development information is important for ensuring both settings are fully informed of the status and needs of children entering primary school. Figure 5.4 illustrates the degree to which this is done across 29 participating OECD and partner countries. Information sharing between the last year of ECEC and primary school is common practice or is done often in 59% of countries. On the other hand, in 21% of countries it is not common to share child development information. It is up to the settings to decide whether they share child development information in 17% of countries. And, in 3% of countries, this practice is only common for specific groups (e.g. children with special needs). These figures show the exchange of information across educational levels in both integrated and split systems. The collaboration is likely to be more challenging in jurisdictions with a split system, however.

Figure 5.4 In most jurisdictions it is common practice to share child development information

Sharing child development information between the last year of ECEC and the first year of primary school



Notes: Information based on 29 jurisdictions.

Common practice: Austria, Colombia, Croatia, Germany, Hungary, Italy, Japan, Kazakhstan, Luxembourg, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey.

Setting decides whether to share information: Belgium (Flemish Community), Canada, Denmark, Finland, Greece.

Not common practice: Chile, Czech Republic, Ireland, Mexico, Slovak Republic, United Kingdom (Wales).

Done for specific groups only: Slovenia.

Missing data: Netherlands.

Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495712>

Sharing developmental information can be a good way to foster collaboration by staff from both sectors (see Box 5.4 and Chapter 4). In some participating countries (e.g. Austria, Norway and Slovenia), the exchange of information about an individual child across sectors has to be done in co-operation with parents. Parents must give their consent for transferring children's information to primary school. Regulations on information transfer, however, have been implemented in Austria and Slovenia to tackle challenges that have emerged due to rules on data protection (see Chapter 3).

Ethical issues on the transfer of information have to be taken into account. This has been discussed recently in Norway (Turunen, 2012). Transfer of information, however, cannot replace dialogue – either between teachers in different settings (preschool and primary school) or between teachers and parents.

Exchanges between primary schools and ECEC settings are frequent

Opportunities for collaboration across sectors that were frequently cited by participating jurisdictions are visits to primary school and ECEC settings. Around 93% of jurisdictions that responded to the survey reported offering visits to schools, while 68 % reported having exchange days, allowing children from primary school to visit their peers in ECEC settings and vice versa (Figure 5.1). In Austria, these visits often take place in the context of the so-called “reading days” or “reading buddy lessons”. Slovenian head-teachers report that planning school visits helps ensure pedagogical continuity between kindergarten and school. When planning visits, preschool and primary school teachers also collaborate on developing common topics and methods of work (e.g. language and speech competences of children in relation to creativity, shared ideas, experiences, and practices). Finnish staff also co-ordinate preschool and primary school visits together, organise joint events and provide some joint teaching (Ahtola et al., 2011a).

Logistical barriers, however, may pose challenges for these types of activities. This may be the case when ECEC settings and schools are situated in different buildings or are far apart. Slovenia reports that transition practices can become more difficult to implement and also less efficient when kindergarten and schools are not linked, i.e. do not share managers or facilities.

Box 5.4 Case study: Sharing child development information as a tool to improve communication: examples from Australia and Ireland

Across Australia, a number of initiatives aim to improve communication between schools and early childhood education and care services. The Transition to School Statement, for example, was introduced in New South Wales in 2014 to improve communication between early childhood services, families and schools (NSW Government, 2016). The statement records a child's strengths, interests and learning, in line with the Early Years Learning Framework. Its aims are to help school teachers prepare for children entering kindergarten by planning appropriate and individualised learning and teaching programmes.

An evaluation of the statement found that both parents and kindergarten teachers who had received them felt better informed about the child's strengths and interests, as well as of ways to help their transition to school, than respondents who did not receive statements (NSW Government, 2015). Most families surveyed felt that their children made a smooth transition to school, and felt that their child was well supported in their transition. The evaluation found that although the statement was seen as a valuable resource by early childhood educators, workload and time constraints made it challenging to complete.

Recent reforms to the national primary curriculum in Ireland have introduced a new transitions initiative as part of a government ruling requiring the transfer of information on children's learning and development (DES, 2011).

The ruling requires all schools and state-funded ECEC settings to provide written reports of children's progress and achievements in a standard format to their new schools and settings (following their admission). The new national transition initiative, being undertaken by the National Council for Curriculum Development and Assessment (NCCA), will integrate information transfer between the ECEC and primary school sectors. Transition templates to record and monitor transitions for each child between ECEC and primary schools are currently being piloted by the NCCA with a variety of ECEC settings and primary schools, and in consultation with children, parents and other key stakeholders, such as primary school principals and ECEC managers. They will be published and in use by September 2018. The reform has also commissioned a review of literature nationally and internationally, an audit of policy across jurisdictions and an audit of transfer documentation in Ireland. Additional proposed activities of the wider transition initiative include the establishment of local networks, the dissemination of information to families, reciprocal visits by primary and preschool staff and children to schools and preschools, and the development of materials and books to support children during the transition process.

Sources: Case study prepared by the Australian Department of Education and Training, and the Irish Department of Children and Youth Affairs, edited by the OECD Secretariat.

DES (2011), "Literacy and numeracy for learning and life", Department of Education and Skills, Dublin, www.education.ie/en/Publications/Policy-Reports/lit_num_strategy_full.pdf; NSW Government (2016), The Transition to School: Literature review, Centre for Education Statistics and Evaluation; NSW Government (2015), Evaluation of the Transition to School Statement, Centre for Education Statistics and Evaluation, www.cese.nsw.gov.au/images/stories/PDF/Transition_to_School_Report_final.pdf; O'Kane, M. (2016), "Transition from preschool to primary school", Research Report 19, NCCA, www.ncca.ie/en/file/early/ResearchReport19_LR.pdf; O'Kane, M. and R. Murphy (2016a), *Transitions from Preschool to Primary School: An Audit of policy in 14 Jurisdictions*, www.ncca.ie/en/file/early/International-Audit-Draft-11.pdf; O'Kane, M. and R. Murphy (2016b), *Transition from Preschool to Primary School: Audit of Transfer documentation in Ireland*, www.ncca.ie/en/file/early/National-Audit-Draft-10.pdf.

Equally challenging is the fact that primary schools can receive children from many different kindergartens – often the case in large cities. This makes co-operation between so many schools especially difficult. To tackle this challenge some Danish municipalities organise joint collaboration among all the ECEC and local schools within the same catchment area (see Chapter 3).

Collaborative professional learning groups are formed in a few jurisdictions

Several participating jurisdictions have created collaborative professional learning groups as platforms to exchange ideas and practices across sectors (see Chapter 3). Examples of this type of collaboration were reported in Austria, Denmark, Japan, Slovenia and Wales (United Kingdom).

Austria recently established a network project to facilitate co-operation on transitions between staff of ECEC settings and primary schools. This group has developed a communication and information platform containing examples of best practices in order to share the ideas, concepts and experiences of the institutions participating in this network (see Box 5.5).

Box 5.5 Case study: Collaborative platforms of best practice in Austria

The Federal Ministry of Education and Women's Affairs has initiated several network projects with the objective of developing local approaches to improve the individual support given to all children. In September 2014, the network project "Transitions ECEC-primary school" was initiated. The aim is to facilitate co-operation between teachers of both institutions, to ensure qualitative guidance and to better co-ordinate the school entry phase. The last year of kindergarten and the first two years of primary school are considered to be the "school entry" stage. This extended period of entry to the school system allows children to benefit from continuity in learning.

A total of 35 primary schools and co-operating kindergartens from across all nine federal states participate. The aim of the network projects is to test successful factors for a nationwide implementation. They also give support for initial and in-service education and training. Examples of project activities to improve co-operation between ECEC and primary school include: collaborative projects; the collection of best practice examples; the transfer of information between ECEC and primary school via specifically designed forms or portfolios; and the creation of so-called "transition teams" (described in the section below).

For the ECEC settings and primary schools that participate in the network projects, communication and information platforms are established. The Federal Ministry of Education and Women's Affairs requests participating institutions to share the resulting ideas, concepts and experiences with the other participants via these platforms. This exchange produces a collection of best practice examples.

Additionally, the federal state of Salzburg has issued a folder on the transition from ECEC to primary school. The folder offers an overview of all projects and models currently employed by kindergartens and primary schools at the federal state level. The goal is to provide inspiration for new projects and to promote collaboration. Furthermore, in some areas of Austria smaller networks have been established at the local level to allow kindergartens and primary schools to exchange information and carry out projects together.

Source: Charlotte Bühler Institut (2016), Austria Country Background Report on Transitions from ECEC to Primary School, www.oecd.org/edu/school/SS5-country-background-report-austria.pdf.

Collaboration with other child-focused and community services is common in many jurisdictions

The objective of community service collaboration in transitions is to create coherence, continuity and progression in children's development and learning (explained in the Swedish curriculum; Skolverket, 2011, see Table 4.A.7 in Chapter 4). The various services should co-operate to exchange knowledge, experiences and information about the education programme and the development of individual children. The type of community services involved seems to vary across countries and according to the needs of the child. It can include professionals such as school psychologists, school physicians, speech therapists, auxiliary teaching staff, native-language teachers and social workers. Health professionals are often involved in providing support for children with special learning needs.

All participating countries report some type of co-operation among ECEC, primary schools and other community services. However, only half the participating countries recognise either in their education acts and/or their curriculum the important role of community services in enhancing children's transition to school (Table 5.5). For example, Finland's Basic Education Act states that to secure a continuous learning path for children it is important to provide an opportunity for other early childhood and basic education personnel to participate in the transition process. Similarly, the Austrian curriculum for primary schools recommends collaboration with services offered outside the school. The exceptions are Denmark, Japan, Wales (United Kingdom) and Kazakhstan.

Child-related and community services support children's transition through a variety of activities, including assessing children's school readiness, providing health check-ups or giving help to children with special learning needs. These are described in turn below.

Table 5.5 Is collaboration with community services mentioned in education acts and curricula?

	Education acts	Curricula
Austria	No	Yes
Denmark	No	No
Finland	Yes	No
Japan	No	No
Kazakhstan	No	No
Norway	No	Yes
Slovenia	Yes	Yes
Sweden	No	Yes
Wales (UK)	No	No

Source: OECD country background reports on transitions, 2016 and 2017.

Teams of professionals assess children's school readiness in several countries

Some jurisdictions report collaboration with community services outside the school for assessing school readiness. It is worth noting that the definition of “school readiness” varies widely across countries. In the English-speaking countries in general, it focuses in the acquisition of a range of knowledge, skills and dispositions needed for entry into compulsory school. In other countries, such as the Nordic ones, the ECEC years are seen as a preparation for life and the foundation of lifelong learning (OECD, 2006; see also Chapter 6).

School management in Austria, for example, may call in a “transition team” to assess whether the child is ready for school or not and to suggest appropriate support assistance measures. Depending on children’s needs, this team may consist of a wide range of professionals. In addition, a school doctor may conduct a physical examination to determine children’s physical maturity. Medical reports, expert opinions, reports from other doctors or therapists and carers may also be used, but only when permitted by the legal guardian (BMUKK, 2013).

In Denmark, the Pedagogical Psychological Counselling service (*Pædagogisk Psykologisk Rådgivning* or PPR) is responsible for determining children’s school readiness. Among other functions, PPR employs a team of language consultants and psychologists who are often included in supporting and assessing the child’s development before the child starts school.

In Slovenia, to assess school readiness, schools may collaborate with external services such as the department of mental health (to conduct psychological testing) or the counselling centre for children, adolescents and parents. All six-year-olds have to pass a health check-up done by paediatricians in a healthcare organisation before starting school. The check-up includes a medical examination and a quick screening of basic competences. The doctors may suggest deferring admission, and are also on the school committee responsible for assessing and evaluating school readiness.

In Wales (United Kingdom), children with special educational needs who are about to start school are assessed by a so-called “committee for transition”. These committees include the school supervisory authorities, representatives from special educational needs kindergartens, school psychologists and school physicians. The purpose of the committees is to develop a comprehensive picture to identify the best school to give the best possible support to the child.

Health professionals are often involved in transitions

Health centres are also involved in the transition of children in many participating jurisdictions (e.g. Denmark, Finland, Kazakhstan, Slovenia and Wales (United Kingdom)). Finnish ECEC centres

co-operate with children's health clinics at the municipal level. One method of collaboration is through a health check-up for four-year-olds (known as the Hyve 4). This assessment was developed based on research that showed that problems with learning during the early stages of schooling can be predicted by the age of four.

In Kazakhstan at the end of pre-primary education all children undergo a medical examination. Each child gets a "Passport of child's health" from the children's polyclinic before entering compulsory education. If the child attends a preschool institution, the passport is filled out by a preschool healthcare worker. After finishing pre-primary education, the passport is transferred to school for ongoing checks of children's health.

In Wales (United Kingdom), children who have a recognised significant health condition receive transition support from the health services. The universal child health surveillance programme, run by Health Visitors, is designed to identify children with developmental delays and to respond to parental concerns.

In the Netherlands, the healthcare services for young children (consultatiebureaus) are responsible for monitoring children's physical, cognitive (language) and social-emotional development from birth until the child starts primary school at the age of four. These services give advice to parents on diverse topics including the possibility of sending their children to an ECEC setting with a targeted programme. These services for young children build a close relationship and co-operation with parents and ECEC staff.

There is a mandatory health check-up for children before they start primary school (*Schuleingangsuntersuchung*) in 15 German Länder (except Bayern, where it is only mandatory in special cases). The paediatrician checks the child's physical (e.g. visual, hearing or speech disorders), cognitive and socio-emotional development. If the medical assessment concludes that the child is not yet "ready" to start school, the child may be allocated additional support, such as physio, ergo or speech therapy. The results of the check-up are however confidential and are not shared with the preschool.

Multi-actor collaboration is common for children with special needs

In Norway, in addition to parents, the kindergarten and the school, many other key actors may be involved to support special needs children with the transition to primary school. These may include the public health centre and the child welfare service (PPT). The municipalities of Ål, Gol, Hol, Hemsedal, Nes and Flå run a co-operation project together with Statped, the national service for special needs education. The topic of transitions between kindergarten and school is part of this collaborative project. The goal is for staff in kindergarten, schools, the public health centre and the PPT to all contribute to a coherent, safe and predictable start of school for all children and their parents (Kunnskapsdepartementet, 2008; Utdanningsdirektoratet, 2014).

In Wales (United Kingdom), any child demonstrating developmental problems is offered appropriate interventions from health professionals and community resources. If – despite these interventions – the child has a residual difficulty likely to affect her or his education, the health professionals refer them on to local authority education services for an assessment of any special educational needs that may require additional support in school. Additionally, some kindergartens employ specific teachers to help with the integration of children with special needs, and who also provide support and assistance during the process of transition. Schools and nurseries are reporting a sharp increase in the number of children with delayed speech and language. Programmes are in place to provide support and knowledge to parents in order to help them develop children's language skills as early and effectively as possible. The Welsh Government has also commissioned a review of the support services available for early intervention on speech and language difficulties.

Other participating countries providing additional support via community services for children with special needs in collaboration with parents include Japan, Slovenia and Sweden. In Japan, all children with disabilities, including developmental disabilities, receive support from medical, welfare and other relevant local organisations. This support is conducted in collaboration with families and with early support co-ordinators or similar officers who act as the point of contact. In Slovenia, the kindergarten counselling service helps parents to arrange the documentation in time for the child to get appropriate support from the first day of school. In Sweden, health professionals and special needs teachers can help facilitate transitions for children in need of extra or special support.

By contrast, in Austria, no special assistance is provided for children with special educational needs unless a specific request for an assessment procedure is made by the child's parent. Ideally, parents file a request during the registration processes at school. This request is followed by a five-month-long observation process during which special educational needs experts as well as school psychologists or school physicians (with the consent of the parents) make a recommendation to the school board of the corresponding district.

Cross-setting collaboration also occurs to ensure developmental continuity during horizontal transition

Reciprocal exchanges on the pedagogical approaches of the preschool, the preschool class, the school and before and after-school care can help enrich children's development and learning in their "horizontal transitions" (see Box 1.1, Chapter 1). Some countries collaborate with other ECEC centres and after-school organisations to support horizontal transitions (see also Chapter 4). In Finland's municipalities, for example, staff in ECEC, pre-primary¹⁴ and primary education work together to implement curricula and also to co-operate on transitions. After-school activities can, for example, be organised by non-government organisations, adding yet another actor for inclusion in ensuring quality transitions.

Some preschool settings in Luxembourg apply transitions practices that support intersectional coherence and continuity. These practices aim at ensuring a smooth transition between sectors and types of learnings at different moments of the day: the child's transition from home to the daycare centre; arrival and separation from parents; handing the child over to the childcare worker and the child's integration into the playroom; and the transition between situations of "formal lessons" and informal learning (Bollig, Hong and Mohn, 2016).

In Japan, some nursery and ECEC settings focus on co-operating with after-school children's clubs. The objective of this kind of service is to support the upbringing of primary school children whose parents/guardians are absent from home due to work responsibilities. After-school clubs use children's recreational facilities or other school facilities and provide adequate opportunities for spending the afternoon playing, learning and sharing with other peers.

In Wales (United Kingdom), Flying Start services are often involved in helping the transition from childcare settings to an early education setting. Specific guidance is given on how services should be involved. However, there is great variation in how well this operates in practice due to variations in the management structures in local authorities and location of services.

In Sweden, when children start at preschool class they also attend a recreation centre. The recreation centre is a part of the school system and its aim is to complement the education provided by the preschool class and school. The centres stimulate development and learning as well as allowing children to have meaningful free time and recreation. Such reciprocal exchanges between the pedagogical approaches of the preschool, the preschool class, the school and the recreation centre can help enrich children's development and learning. Recreation centres are thus one of the key players in Sweden involved in ensuring a good start in compulsory school.

What are the common developmental continuity challenges and how are they overcome?

This section explains the main challenges in achieving fruitful collaborations among the stakeholders involved in transitions. Drawing on the information gathered in the country background reports, it describes the discussions and debates which jurisdictions are having on this topic and outlines a wealth of strategies developed to tackle these challenges (summarised in Table 5.6).

Table 5.6 Challenges and strategies in ensuring developmental continuity

Challenges	Strategies
Children's views are not fully accounted for when shaping policies and practices for transitions	<ul style="list-style-type: none"> Specify in education acts or curricula children's right to participate Conduct research involving children
Parents' lack of awareness of the importance of the transition process hinders their involvement	<ul style="list-style-type: none"> Develop and provide support materials for parents on transitions Offer multiple activities to increase parents' awareness of and participation in transitions
Difficulties engaging parents of disadvantaged backgrounds in the transition process	<ul style="list-style-type: none"> Adapt support materials to the needs of immigrant parents and children Develop innovative participatory activities to involve marginalised parents Complement transition activities with parenting programmes
Unequal relationships and poor understanding between ECEC staff and primary school teachers	<ul style="list-style-type: none"> Develop initiatives to share child development information Organise joint training Create collaborative professional learning groups Integrate both levels of education in the same location
Limited co-operation with other child development services	<ul style="list-style-type: none"> Establish working teams with professionals from different sectors

Challenge 1: Children's views are not fully accounted for when shaping policies and practices for transitions

Understanding children's views of their experience of the transition process is essential for developing transition practices (Ackesjö, 2013). Listening to children and their experiences helps to better understand the challenges they face and help to improve the support given by parents and schools. Children's participation, however, appears to be limited in reality, as discussed earlier in this chapter. Slovenia also noted this in its country background report.

Strategy: Specify in education acts or curricula children's right to participate

Some countries report having clauses in their education acts and/or curricula on the importance of accounting for children's perspectives when designing, planning and evaluating transition programmes. This approach can be a first step to ensure ECEC centres and primary schools consider children's views when developing their transition practices.

In Norway, children's right to participation is explicitly mentioned in both the Education Act and the Framework Plan. Kindergarten teachers are trained to identify children's interests and use them in pedagogical situations in everyday life. Furthermore, the national guide on transitions emphasises that the child is the most important actor and that her/his experiences and perspectives should be the starting point for developing activities. The guide underlines that children often have clear opinions on what is important to know when they are about to start school and they should be heard.

Similarly, in Sweden the Education Act stipulates that the views of the child should be mapped out as far as possible. Children should have the possibility to freely express their opinions in all

matters that concern them. The opinions of the child should be weighted in relation to their age and maturity. The best interests of the child should be a primary consideration.

Strategy: Conduct research involving children

In Finland, children's views are increasingly being taken into account in recent years. Furthermore, children are also being involved in research more and more. They contribute to knowledge not only by being surveyed, but also by acting as researchers themselves. These inclusive research methods aim at better understanding children's daily experiences from their own perspectives (Karlsson and Karimäki, 2012; Eskelä-Haapanen et al., 2016).

Challenge 2: Parents' lack of awareness of the importance of the transition process hinders their involvement

Most jurisdictions report that there is still insufficient parental awareness of the powerful role parents play in children's education, particularly during the transition stage. Certain attitudes and beliefs, combined with this lack of awareness, are likely to obstruct parents from being active players in their child's transition. In many countries, parents continue to consider primary school as having a much more prominent role in children's education than ECEC. Austria, for example, mentions that the belief that "the serious side of life begins with the start of school" still prevails. Another common line of thinking that obstructs parental involvement is that the transition process is unproblematic and transition activities are hence taken for granted.

Parents as well as children would benefit from greater awareness of the issues surrounding the transition to primary school, including the differences in the learning environment and why specific measures or activities are implemented. However, ECEC staff often do not explain transition activities well enough. A high level of uncertainty is not positive for the child, the parents or the teachers (Lillejord et al., 2017). Lack of communication with and from school is hence an important barrier to parental involvement (Malsch et al., 2011).

Countries have developed a range of strategies to raise awareness among parents of the importance of preparing and supporting children before, during and after the transition period.

Strategy: Develop and provide support materials for parents on transitions

The majority of countries develop and publish support materials to inform and orient parents on what life and learning will look like in primary school, and to provide advice to parents on how to support children during this stage (see Box 5.6 for an example of Wales (United Kingdom)).

In Austria, the Federal Ministry of Education and Women's Affairs has produced a guide for parents titled "Welcome to school" (BMBF, 2015). This publication explains how parents can support their child until the start of school. Topics covered include getting ready for school, the way to school, and the importance of play. Additionally, it includes general and legal information on the official start of school and on the ways in which parents may contribute and take on responsibilities in the school setting. Moreover, a series of folders and brochures contain ideas for activities that parents can carry out with their child such as how to prepare for school, how to encourage positive views of school and tips for successful play.

Early Childhood Australia has compiled many print and online resources for parents, carers and educators to provide support during the transition period (For further information, please see: www.earlychildhoodaustralia.org.au/parent-resources/transition-school). One example is a book for parents and carers, "Your child's first year at school: Getting off to a good start", explaining what parents need to know to support children's transition to school and containing specific tools for children with

disabilities or socio-emotional and behavioural needs (Hirst et al., 2011). Additionally, KidsMatter Australia has issued several materials to help parents recognise and seek support if children present difficulties. The Queensland Department of Education and Training and the Victoria State Government have also developed several guides for parents, ECEC providers, and schools to explain the importance of successful transitions beyond a “good first day”, and to provide advice and techniques to support their child (Queensland Government, 2015a, 2015b; State Government of Victoria, 2009).

Similarly, the Ministry of Education in France introduced the parent’s suitcase (“la mallette des parents”) in 2012. The aim is to support the main transitions in school, including from preschool (*maternelle*) to the first year of primary education (*cours préparatoire*, or CP). Parents receive the suitcase during a school meeting with teachers. It contains tools on learning how to read; helping the child to learn about primary school; and well-being in school. These subjects are presented during school meetings where parents can learn more about how to help their children. This method of co-education aims to enable parents to better understand how primary schools function (French Ministry of Education, 2015; 2016).

Box 5.6 Case study: Parents’ transition support materials in Wales (United Kingdom)

The Welsh Government has developed several initiatives to communicate with parents. These include “How is my Child Doing in the Foundation Phase?”, a document which all parents receive when their children start the Foundation Phase. This document explains the fundamental pedagogical principles and broad approaches of the Foundation Phase; sets out what parents can expect from schools and settings; and offers suggestions on how parents can support children’s learning and development. In addition, the FaCE (Family and Community Engagement) guidance, published in 2015, places an emphasis on engagement that helps families to actively support their child’s learning. There is a focus on how to engage with families of children who are currently underperforming, children from deprived backgrounds, and those receiving less support for their learning at home. “Ready to Learn” is designed to help parents and carers prepare their child for school through a range of engaging resources available from schools and nurseries. Resources aimed at parents and carers of children who are aged four or soon-to-be starting school provide advice and tips on how to prepare children for the transition, with ideas ranging from play to more structured learning. It includes a ready-to-learn activity leaflet.

Source: Case study prepared by the Welsh Government, edited by the OECD Secretariat, Welsh Government (2014), “How is my child doing in the Foundation Phase? A guide for parents and carers”, <http://gov.wales/docs/dcells/publications/140707-how-is-my-child-doing-in-the-foundation-phase-en.pdf>.

Strategy: Offer multiple activities to increase parents’ awareness of and participation in transitions

In **Austria**, there is a desire to make parent-staff conversations about transitions mandatory to raise awareness of the importance of parental involvement in children’s education. Currently, some parents do not participate in these exchange opportunities with staff. It is believed that regular joint discussions of children’s developmental progress could assist in changing parents’ perceptions.

In **Finland**, most parents or guardians co-operate in organising ECEC (pre-primary education) teaching and pedagogies. This active involvement ensures that all children receive teaching, guidance and support in accordance with their own development level and needs.

Slovenia reports good collaboration with parents over transitions. It seems that the activities it has implemented to encourage parental involvement are associated with this positive perception. These include individual consultations about child development in kindergarten and informative meetings at school prior to school entry. This more personal approach helps parents to get to know the staff in kindergarten and schools, and helps them build confidence and trust in their relationship. The transition process is discussed with children and their parents, which allows staff to explain the importance of active participation by both parents and children, as well as to identify children’s and families’ specific needs. It also strengthens collaboration with parents.

In addition to providing transition guidelines, **Sweden** offers other activities, including parents' meetings in the preschool class which include primary school teachers, preschool school visits for the preschool class, and assigning preschool children "buddies" in the primary school.

In **Japan**, individual boards of education, schools and facilities undertake a variety of actions to address the concerns of parents and guardians and to deepen their understanding of transitions. These include holding information sessions, providing opportunities for parents/guardians to exchange opinions with each other, and organising visiting days to allow newcomers to become acquainted with the new setting. ECEC and basic education providers are required to set out practices and co-operation in their local curriculum, in addition to the goals defined in the national core curriculum.

The **Brückenjahr** project in **Germany** (Lower Saxony) addresses parental engagement by providing multiple opportunities for parents to participate in transition activities. These include providing support materials; organising a wide range of workshops; and inviting families to school events and festivals. Parental involvement is enhanced by assuming a shared responsibility between parents and teachers for shaping children's learning experiences. These activities are complemented with other strategies aimed at fostering connections between kindergarten and primary schools (Huser, Dockett and Perry, 2016).

Challenge 3: Difficulties engaging parents from disadvantaged backgrounds in the transition

Participation in transitions can be especially limited for families from disadvantaged backgrounds. These include families of low socio-economic status, families of immigrant origin, indigenous families and families with children with special learning needs. Denmark and other participating jurisdictions report that it is particularly difficult and challenging to engage these vulnerable children and their families. Yet evidence suggests that opportunities to become familiar with the new learning environment are of particular importance for disadvantaged children (LoCasale-Crouch et al., 2008).

The immigrant population of many OECD and partner countries has grown rapidly over the past decade and diversity in ECEC centres and schools is increasing as a result. Attention to the needs of language-minority children is becoming of utmost importance. Taking parental background into consideration can reduce the risk of an unsuccessful transition (Peters, 2010). At the same time, evidence from the United States shows that children that are at most risk when transitioning to compulsory school are less likely to be exposed to the supportive practices that could give them the best chance of experiencing a successful transition (Schulting et al., 2005). Participating jurisdictions have implemented a number of strategies to encourage parents from disadvantaged households to participate in the transition process.

Strategy: Adapt support materials to the needs of immigrant parents and children

In **Norway**, the national guide on transitions underscore the need to provide adequate and relevant information (e.g. legal, practical, structural and content) on schools to parents of language-minority children. The guide is not directed at parents specifically, but at municipalities, schools and ECEC centres as support material on how to engage with this type of families. The guide also suggests translating relevant materials and using interpreters in areas where there is a large number of language-minority children.

Austria's network project "ECEC-primary school" (see Box 5.5) develops guidelines for local approaches for improving the individual support given to each child during the transition to primary school. The guidelines are based on the latest research findings on transition, and put the acquisition of first and second language skills and multilingualism at the centre. As part of this project, the federal state of **Lower Austria** also provides parents with the necessary support and information on transitions from ECEC settings to primary school in different languages (e.g. Bosnian/Croat/Serbian, Bulgarian, Czech, Turkish). Parents receive advice on how to promote children's learning and on how the home environment can support the child in her/his preparation for school.

Wales (United Kingdom) and Australia have both developed a package of activities designed to reach disadvantaged families (see Box 5.4 and 5.6). In 2015, Wales issued a toolkit for schools on how they can engage with families and communities. The FaCE (Family and Community Engagement) guidance explores how to engage families of children who are currently underperforming, children from deprived backgrounds, and those receiving less support for their learning at home. The resources place an emphasis on providing tools that help families to actively support their child's learning.

Strategy: Develop innovative participatory activities to involve marginalised parents

The HIPPY (Home Instruction for Parents of Preschool Youngsters) programme is implemented in a wide range of countries, including Australia, Austria, the Netherlands and the United States. HIPPY aims to provide support to socially disadvantaged families and parents of children aged three to seven. Once a week the family is visited by trained peers from the same sociocultural background who provides first language assistance and learning activities for children. The visitor acquaints parents with games and learning materials in their mother tongue. Parents are also encouraged and empowered to create learning situations for their own child. In Vienna (Austria), the HIPPY Plus-Programme includes support in school. Bilingual tutors are used in schools with a high percentage of migrants. In Australia, the programme has been adapted and it operates in at least 100 communities across the country. The programme is fully funded by the Australian Government through the Department of Social Services (<http://hippyaustralia.bsl.org.au/about/>).

The Welsh Government has developed the “Education Begins at Home” campaign, aimed at narrowing the learning gap between the most affluent and the most deprived pupils. It emphasises how small things done at home can help children in school. “Ready to Learn”, launched in 2016, is a key element of this campaign. It is designed to help parents and carers prepare their child for school through a range of engaging resources available from schools and nurseries (described earlier). Wales’ Flying Start programme supports families with young children (zero to four) in disadvantaged communities. The core elements of the programme include free quality part-time childcare for two to three-year-olds; an enhanced health visiting service; access to parenting support; and support for the development of speech, language and communication. Several studies have shown that this programme is positively associated with children’s language skills and social and emotional development, all of which are important for school readiness (Welsh Government, 2015; Welsh Government, 2013a).

In New Zealand, “Belonging mana whenua” is a key strand of the ECEC curriculum which aims to ensure that children and families of indigenous origin feel welcomed and at ease in the ECEC settings and in the wider learning community. The ECEC curriculum is aligned with the school curriculum’s “Participating and Contributing”, underlining the importance for children’s engagement and learning of developing a sense of belonging (Peters, 2010).

Another example of support to at-risk families is found in the well-researched United States Abecedarian (preschool) programme, which provides sustained assistance to families and has improved children’s learning outcomes as a result. The K-2 Programme (which begins after the preschool Abecedarian project) includes supportive services to enable parental involvement; to influence the child’s home learning environment; and to provide training and support to teachers for the first three years of primary school (kindergarten and grades 1 and 2). Educational support services are implemented by a master teacher with experience of working with at-risk families who can help parents assist their children in negotiating the transition more successfully.¹⁵ Children who participated in the combined Abecedarian preschool and K-2 programmes were found to have better mathematic and reading performance than all other control groups (Ramey et al., 2000).

Strategy: Complement transition activities with parenting programmes

Another way to support and encourage parents to participate in shaping children’s transition to school is through parenting programmes. Research shows that the quality of parenting is associated

with children's future learning, health and well-being. Parenting interventions can help reduce inequalities in outcomes and when complemented with transition activities can help both parents and children better navigate the transition process.

Wales' Flying Start programme (described above), provides parenting support guidance. A qualitative evaluation conducted in 2013 identified a range of positive outcomes reported by parents (Welsh Government, 2013b). In particular, parents whose children had attended Flying Start childcare believed their children had more confidence and were better prepared for school. Parents with high needs reported their children had improved language skills and social and emotional development, which are important for school readiness. These positive associations are not necessarily attributed to the parenting support, but it could be one factor in these perceived positive outcomes.

Australia has several parenting programmes in place. One of particular relevance is the AusParenting in Schools Transition to Primary School Parent Program. This provides multiple activities to encourage parents to participate in shaping children's learning experiences. The objectives are to: 1) provide opportunities to learn strategies to support children's adjustment to school; 2) promote families' involvement in children's learning at home and at school; and 3) facilitate collaboration between families and schools (Hirst et al., 2011). An evaluation of the programme suggests that participating parents reported lower levels of concern regarding the transition process than parents who only participated in routine transition practices. Moreover, participating parents reported higher levels of self-efficacy in managing transitions and greater involvement with school (Giallo et al., 2007; Giallo et al., 2010).

Challenge 4: Unequal relationships and poor understanding between ECEC staff and primary school teachers

Unequal relationships between ECEC staff and primary school teachers create tensions that hinder fruitful collaboration and successful transitions (Lillejord et al., 2016). This imbalance is derived from the numerous differences prevailing between the two levels of education (see Chapter 3), a lack of understanding and awareness of the different approaches and pedagogies (see Chapter 4) as well as of lack of time and resources for co-operation (Chapter 2). In Norway, research suggests that kindergarten staff seem to have a better understanding of the school day and learning situations at school than primary school teachers (Rambøll, 2010); and they tend to put more weight on transition and coherence than primary schools (Hogsnes and Moser, 2014).

Most participating countries reported this as an area with room for improvement. Kazakhstan, for instance, reports that the lack of a network of ECEC settings and primary schools makes it difficult to ensure continuity across the two levels of education.

Strategy: Develop initiatives to share child development information

Sharing information about the developmental progress of the child can foster collaboration between sectors and with other actors involved in transitions. However, such information is not always transferred from ECEC to primary school (see Chapter 3). Consequently, teachers in primary school tend to start from zero at the beginning of the school year, which hinders developmental continuity. For close co-operation on sharing information, countries may consider complementing written reports with face-to-face meetings between preschool and school teachers as well as with parents, as suggested by kindergarten (preschool) and school teachers in **Finland** (Hogsnes and Moser, 2014).

Slovenia reports that kindergartens and schools usually co-operate in determining the child's school readiness, when necessary. An emerging and consistent challenge, however, is the transfer of information about an individual child between the two settings. The law helps to define the data that can be collected and in what circumstances it can be shared (e.g. the postponement of

children's entry to school). Some local authorities encourage sharing individual information for transition planning. This can be a tool to strengthen continuity, but it should be accompanied by discussions between parents and teachers to build a shared understanding of the transition process.

In **Finland**, preschool staff and primary school teachers co-ordinate on several levels to prepare the transition stage. The preschool teacher, the grade-one teacher, and any involved specialist (e.g. school psychologist) meet to discuss school entrants in terms of their skills, peer relations and preferences. In **Norway**, sharing child development information across sectors is well established at the local level. Parents play an important role in this exchange process. They can decide what information is transferred and they have to give their consent before the kindergarten can provide the information to the school. According to the Framework Plan, the information must focus both on what children can do and are capable of, and where they need special assistance. A survey of schools showed that most municipalities (95%) have a system for transferring child development information from the ECEC setting (kindergarten in Norway) to school. In most cases, this includes all the kindergartens and schools in the municipality (Vibe, 2012). In addition, a survey of ECEC settings showed that practically all (98%) ask the parents for consent to transfer information about the child to the school (Sivertsen et al., 2015).

In **Wales** (United Kingdom), progress has been made in implementing effective processes to share information between settings. The Early Years Development and Assessment Framework aims to establish approaches to align the various development assessments and ensure that they are shared across all relevant services. Individual profiles are provided for each child who is leaving Flying Start childcare and starting in a new Foundation Phase setting. Another effective way of information sharing which has been adopted by many Flying Start teams is arranging face-to-face meetings between Flying Start and Foundation Phase professionals. These meetings provide an opportunity for discussing and collaborating over the individual needs and skills of a child as they move from Flying Start to the Foundation Phase.

Strategy: Organise joint training

Teachers' initial education and professional training are important moments for professionals to learn about each other's professional contexts and where they can start to understand themselves as equal collaborators. In **Austria**, attitudes such as "Let children be children for the time being. They will have to start school anyway" are discussed and addressed in joint training of ECEC staff and primary school teachers. In **Japan**, joint training for the teaching staff of kindergartens, nursery centres and primary schools is one of many initiatives to facilitate co-operation across settings. Similarly, **Denmark** envisages more and better coherence in the initial training and education of teachers and ECEC staff. This common approach will ensure both consistency as well as better cooperation opportunities between ECEC and school (see Chapter 3).

Strategy: Create collaborative professional learning groups

As we discussed earlier, some participating countries have set up working teams to enhance collaboration among professionals of different sectors. Working teams, however, do not always guarantee co-operation (as noted in the Swedish inspectorate of schools report (Swedish Schools Inspectorate, 2015)). The same professional jealousies and lack of understanding described above can obstruct co-operation, even within working teams. This, in turn, complicates children's developmental continuity.

Slovenia counts on professional networks for sharing practices. These networks operate within the National Education Institute and are part of so-called study groups. The National Education Institute has several regional units that organise study groups. The study groups are organised separately for preschool teachers, counsellors and heads and meet regularly (four times per year, either in person or online).

In **Japan**, some boards of education are establishing liaison councils to promote staff exchanges between kindergartens and primary schools and to promote an integrated system of kindergartens, primary and junior high schools that includes transitions. At the same time, ECEC staff, primary school staff and university teachers collaborate with the support of local government to formulate transition curricula.

In the **Netherlands**, a good example of close collaboration between ECEC settings and primary schools are the “startgroepen”. These enable collaboration on ensuring continuity in children’s development; offering similar programmes, aligning goals, etc. These collaborations are monitored and evaluated by researchers, who have noted positive results.¹⁶

Strategy: Integrate both levels of education in the same location

In **Austria**, most ECEC centres and primary schools are physically separate. The capital city of Vienna has built schools around a so-called “campus model” to promote co-operation across sectors working with children between the ages of 0 and 14. The “Vienna Campus Model” brings together the pedagogy of ECEC, primary school and leisure in one physical space. So far, four education clusters have been built. This facilitates co-operation between teachers of both institutions and makes transition easier for children as they are already familiar with the learning environment.

In **Scotland**, when nurseries are located in primary schools, collaboration between nursery staff (ECEC) and school teachers can be part of a regular routine of forward-planning meetings, staff meetings and in-service days. For stand-alone settings such as nursery schools and partner provider centres, joint planning may present more of a challenge (Scottish Executive, 2007).

Challenge 5: Limited co-operation with community services

Research into co-operation with child-related services at the time of transitions is not well documented. Furthermore, little is known about the impact of collaboration with services outside the school on child well-being and early learning. Participating jurisdictions report a number of activities and guidelines to foster such collaboration, but few signal challenges in this area. However, this does not mean that this type of co-operation is free of challenges. It is likely that it suffers from similar hurdles as those faced in the co-operation between ECEC and primary schools, especially when professionals are housed in different ministries.

Strategy: Establish working teams with professionals from different sectors

Austria has implemented two types of working teams – the “transition team” and the “committees for transition” – both recognised as valuable projects that provide appropriate support measures during the transition to school. In **Finland**, the more modern school buildings are now mainly designed to be community centres where it is easier to develop a continuum with actors from different sectors.

In **Slovenia**, counselling services operate directly in the kindergarten or school (*svetovalni delavec*). Counsellors might be psychologists, special educators (defectologist), pedagogues, social pedagogues, special and rehabilitation pedagogues, social workers and others. The counselling service implements different activities with different stakeholders, including parents, social work centres and medical centres. Personal data on children needing support and counselling are collected with the agreement of the parents or legal guardians, with the exception of cases where children are endangered by their families and need protection. The role of the counselling service is to assist children and their parents (and staff) in a number of activities, including their transition to primary school.

What policy development pointers arise from this research?

This final section outlines five key policy pointers for ensuring developmental continuity. These are cross-cutting themes emerging from the literature and countries' experiences and struggles outlined above. They are exploratory only, seeking to provide a source of inspiration when designing and revising policies and practices. Not all policy orientations will be relevant for all countries as each country needs to take into account their context (values, traditions, characteristics of ECEC and education systems) and their policy priorities.

Listen to children's voices to improve transitions

National guidelines and curricula emphasise that the child is the most important actor and that the starting point for planning transition activities must be the child's experiences and perspectives. Many jurisdictions have implemented initiatives to take into account children's voices and to make them active participants in their own transition. However, jurisdictions report that children's participation is still limited, and also varies across jurisdictions. In Wales (United Kingdom), the Foundation Phase Curriculum sets opportunities for children to express themselves and be actively involved in initiating and directing their own learning experience. Finland and Sweden, on the other hand, account for children's views by listening to children's voices through research. Studies using children's reports or children's stories help professionals understand the transition process from the perspective of the main actor in transitions. Swedish children, for example, mention that the most problematic issue of transit to preschool class is the separation of friends. Hence, social continuity seems to be an important factor for children's successful transition that needs to be accounted for when planning transitions. These examples illustrate how participation and inclusion of children in developing transition activities and education can be further advanced to really place children's needs at the centre of the debate.

Tackle parents' lack of awareness of transitions

Parents should be better informed of the importance of transitions so they can take a more active and supportive role. Despite important efforts by jurisdictions in providing information to parents through special publications, brochures and parental meetings, further work is needed. The belief that transitions are straightforward and organic hinders parental involvement in transition activities. The rationale and purpose of the transition activities should be explicitly explained to children and parents before, during and after the transition. Parents should be aware that starting school is one of the most exciting, but also one of the most challenging, experiences for young children. They should be aware that while preparing for the start of school, children may experience stress and present some behavioural changes and difficulties – being prepared for these will help enormously.

Information provided in support materials provides useful orientations and advice, but for the transition activities to be effective it needs to be complemented with a wide range of other activities. These include regular discussions with parents and children to familiarise them with the process, activities, new learning environment, and staff of primary schools. Programmes like the AusParenting in Schools Transition to Primary School Parent Program in Australia and Flying Start in Wales (United Kingdom), which offer comprehensive support to parents, have had positive results. As reported above, evaluations of the Australian study indicate that participating parents expressed less worry and concern about transitions than parents who were less exposed to informative activities. Similarly, a qualitative study of Flying Start reported that participating parents perceived that their children were more ready for school (Welsh Government, 2013b).

Tailor transition practices to fit parental needs

Participation in transition activities by families from disadvantaged backgrounds is more difficult to achieve. This group of parents faces numerous barriers to taking an active role in child-related

activities, both at home and at school. These include time availability, language issues, and distance from the ECEC centre or school. Countries have made various efforts to reach out to such families, most often by adapting support materials to their language. Jurisdictions recognise the need to do more, especially given the increasing diversity of backgrounds due to increased migration.

ECEC settings and primary schools could develop “comprehensive transition programmes” to foster parental engagement, instead of offering individual isolated activities or events. It is important to reach all families, especially those whose children are at risk of experiencing learning difficulties and lagging behind. Comprehensive transition programmes are developed in collaboration with families and other stakeholders and give children and their families many formal and informal opportunities to get familiar with school.

Settings often expect parents to adapt to existing transition practices regardless of their cultural and social background. Consideration should be given to particular contexts and families’ diverse needs, adapting policies and practices accordingly. For example, one approach could be to consult with parents on their availability and organise activities around their schedules.

As discussed previously, research suggests that both the frequency and the number of transition activities matter for positive outcomes. It is possible that frequent exposure to activities gives parents a better grasp of what they can do to support their child. At the same time, more frequent contact with school activities and school personnel may ensure trustful relationships with pedagogical staff.

Build strong and equal partnerships between ECEC settings and schools

As we have seen throughout this report, greater collaboration between ECEC centres and schools can contribute to smoother transitions. There is general agreement among participating countries that there should be more collaboration between schools and ECEC in general. Furthermore, it is recognised that working on the transition process requires measures that acknowledge the differences and build on the strengths of each setting. Research in Finland suggests that co-operation between the preschool and primary school, particularly over developing the curriculum and sharing developmental information on individual children, is the best predictor of children’s positive learning outcomes (Ahtola et al., 2011). Austria’s network project on transitions from ECEC to primary school is a good example of a project bringing together the approaches from each sector and working with their respective strengths (see Box 5.5).

Annex 5.A. Detailed country-by-country responses

For **WEB** tables, see: <http://dx.doi.org/10.1787/9789264276253-en>

WEB	Table 5.A.1 Common practices in preparing parents and children for transition
WEB	Table 5.A.2 Staff collaboration with parents by educational sector

Notes

1. Austria, Denmark, Finland, Japan, Norway, Slovenia, Sweden and Wales (United Kingdom).
2. In this US study, parental involvement in ECEC was assessed using reports by parents. The activities included: open-house or back-to-school night, parent-teacher association meetings, parent-advisory group or policy council meetings, regularly scheduled parent-teacher conferences, school or class events, volunteering at school and fundraising activities (Schulting, et al., 2005; 2008).
3. The Head Start programme is a comprehensive programme providing early childhood education, health, nutrition, and parent involvement services to low-income children and their families.
4. The CARE project conducted a Stakeholders Study involving parents/carers, ECEC staff and policy makers in nine European countries: Germany, Greece, Finland, Italy, the Netherlands, Norway, Poland, Portugal and England (United Kingdom).
5. This type of collaboration was noted as the most important factor influencing later academic achievement, but was also the least implemented transition practice (19% of seven ECEC settings implemented this practice).
6. Social-emotional competencies were measured using the Teacher-Child Rating Scale. Examples of the items assessed include: “participates in class discussions”, “completes work”, “well-liked by classmates”, “disruptive in class”, “anxious” and “difficulty following directions”.
7. The eight transition activities included in the questionnaire were:
 1. Taster days, where the child can participate in primary school for one or a few days before starting primary school
 2. Exchange days, where primary school pupils go to an ECEC setting, and vice versa
 3. Open house days, where children can visit the primary school
 4. Parent information meetings to inform parents on how to prepare the child for school
 5. Home visits by the future primary school teacher
 6. Specific information materials for children (books, booklets, television programmes, etc.)
 7. Support from specialists (specifically trained people who do not teach in ECEC, such as psychologists, social care workers etc.) during or after transitions
 8. Information materials for parents including flyers, internet and other materials on how to prepare the child for school.
8. One well-known model in Austria is the “Berliner Eingewöhnungsmodell” (Laewen, Andres and Hédervári, 2003). It describes how to facilitate a smooth transition to the ECEC setting in three phases.

9. For more information see: www.learningpotential.gov.au/primary-school-zone-ahead; www.learningpotential.gov.au/ready-set-school; www.learningpotential.gov.au/top-tips-for-starting-big-school.
10. The Bundesgesetz über die Schulpflicht (Schulpflichtgesetz 1985) no. 6: framework curriculum.
11. New Zealand provides speech and language therapy for children with special needs.
12. Education Alberta: <https://education.alberta.ca/media/3531893/learning-team-handbook-for-parents.pdf>; Education, Newfoundland and Labrador: [www.ed.gov.nl.ca/edu/publications/childcare/child care services inclusion of children with special needs policy manual.pdf](http://www.ed.gov.nl.ca/edu/publications/childcare/child%20care%20services%20inclusion%20of%20children%20with%20special%20needs%20policy%20manual.pdf); Government of Saskatchewan: <http://publications.gov.sk.ca/documents/11/86777-Inclusion%20Program%20Application%20Information%20Mar%202015.pdf>; Government of Manitoba: [www.gov.mb.ca/healthycare/publications/protocol_early childhood_transition.pdf](http://www.gov.mb.ca/healthycare/publications/protocol_early_childhood_transition.pdf); Government of Quebec: www.education.gouv.qc.ca/fileadmin/site_web/documents/dpse/adaptation_serv_compl/19-7065.pdf.
13. The project was conducted in one German Land: Lower Saxony.
14. Pre-primary education in Finland is part of the ECEC system; it refers to the year before compulsory school starts, mainly for six-year-old children.
15. Details of the intervention, which included a summer programme, learning activities and other family services, are available in Ramey et al. (2000).
16. See www.startgroepen.nl.

References

- Abry, T., S. et al. (2015), "Preschool and kindergarten teachers' beliefs about early school competencies: Misalignment matters for kindergarten adjustment", *Early Childhood Research Quarterly*, Vol. 31, pp. 78-88.
- Ackesjö, H. (2013), "Children crossing borders: School visits as initial incorporation rites in transition to preschool class", *International Journal of Early Childhood*, Vol. 45, pp. 387-410.
- Akgündüz, Y. and S.M.M. Heijnen (2016), "Impact of funding targeted preschool interventions on school readiness: evidence from the Netherlands", CPB Discussion Paper 328, CPB Netherlands Bureau for Economic Policy Analysis, The Hague, www.cpb.nl/sites/default/files/publicaties/download/cpb-discussion-paper-328-impact-funding-targeted-pre-school-interventions-school-readiness.pdf.
- Ahtola, A., et al. (2011a), "Successful handling of entrance to formal schooling: Transition practices as a local innovation", *International Journal of Transitions in Childhood*, Vol. 5, pp. 3-21.
- Ahtola, A., et al. (2011b), "Transition to formal schooling: Do transition practices matter for academic performance?", *Early Childhood Research Quarterly*, Vol. 26, pp. 295-302.
- AIHW (2009), *Australia's Welfare 2009*, Australian Institute of Health and Welfare, Canberra
- Appelqvist-Schmidlechner, K. et al. (2016), "Together at school intervention programme. A pilot study on the feasibility and perceived benefits of a programme focusing on improving socio-emotional skills among schoolchildren in Finland", *International Journal of Mental Health Promotion*, Vol.18/3, pp. 127-143, <http://dx.doi.org/10.1080/14623730.2016.1193763>.
- Arndt, A.K., et al. (2013), "Supporting and stimulating the learning of socioeconomically disadvantaged children perspectives of parents and educators in the transition from preschool to primary school", *European Early Childhood Education Research Journal*, Vol. 21/1, pp. 23-38, <http://dx.doi.org/10.1080/1350293X.2012.760336>.

- Arnold, C., K. Bartlett, S. Gowani, R. Merali (2006), "Is everybody ready? Readiness, transition and continuity: Lessons, reflections and moving forward", Background paper prepared for the Education for All Global Monitoring Report 2007, Strong Foundations: Early Childhood Care and Education, UNESCO, Paris.
- Bandura, A. et al., (2001), "Self-efficacy beliefs as shapers of children's aspirations and career trajectories", *Child Development*, Vol. 72, pp. 187-206.
- Bennet, J. (2013). "A response from the co-author of 'a strong and equal partnership' in *Early childhood and compulsory education: Reconceptualising the relationship*", Routledge, London.
- Biewer, G. (2009), *Grundlagen der Heilpädagogik und Inklusiven Pädagogik* Bad Heilbrunn, Verlag Julius Klinkhardt.
- BMBF (2015), *Willkommen in der Schule! Tipps für die Zeit bis zum Schulstart* [Welcome to school! Tips for the time until school start], Schuljahr 2015/16. BMBF, Vienna.
- BMUKK (2013), *Übergang vom Kindergarten zur Volksschule. Schülereinschreibung und Schulreifefeststellung* [Transition from nursery to primary school. Student enrollment and school leaving certificate], BMUKK, Vienna.
- Bohan-Baker, M. and P. Little (2002), "The transition to kindergarten: A review of current research and promising practices to involve families". Harvard Family Research Project, Cambridge, Massachusetts.
- Bollig, S., M-S. Honig and S. Niehaus (2015), *Ethnographische Fallstudien zu den Bildungs- und Betreuungsarrangements 2- bis 4 jähriger Kinder* [The multiplicity in care arrangements for 2 to 4 year old children in Luxembourg], Vielfalt betreuter Kindheiten, Luxembourg.
- Boyle, T. and A. Petriwskyj (2014), "Transitions to school: reframing professional relationships", *Early Years: An International Research Journal*, Vol. 34/4, pp. 392-404.
- Bradbury, B., et al. (2011), "Inequality during the early years: child outcomes and readiness to learn in Australia, Canada, the United Kingdom, and the United States", IZA Discussion Paper No. 6120, Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor, Bonn, Germany, Retrieved 8 October, 2016, from <http://ftp.iza.org/dp6120.pdf>.
- Broekhuizen, M., et al. (2015), "Stakeholders study: Values, beliefs and concerns of parents, staff and policy representatives regarding ECEC services in nine European countries: First report on parents", Utrecht University, http://ecec-care.org/fileadmin/careproject/Publications/reports/CARE_WP6_D6_2_European_ECEC_Stakeholder_study_FINAL.pdf.
- Bronfenbrenner, U. (1994), "Ecological Models of Human Development" in *International Encyclopedia of Education*, Vol.3/2, pp.37-43, Elsevier, Oxford.
- Bronfenbrenner, U. (1986), "Ecology of the Family as a Context for Human Development: Research Perspectives", *Developmental Psychology*, Vol. 22/6, pp. 723-742.
- Center on the Developing Child (2009), *Five Numbers to Remember About Early Childhood Development* (Brief), www.developingchild.harvard.edu (accessed on 9 March 2017).
- Charlotte Bühler Institut (2016), *Austria Country Background Report on Transitions from ECEC to Primary School*, Charlotte Bühler Institut, Vienna, www.oecd.org/edu/school/SS5-country-background-report-austria.pdf.
- Danish Ministry for Children and Social Affairs (2016), *Denmark Country Background Report on Transitions from ECEC to Primary School*, Ministry for Children and Social Affairs, Copenhagen, www.oecd.org/edu/school/SS5-country-background-report-denmark.pdf.

- DES (2011), "Literacy and numeracy for learning and life", Department of Education and Skills, Dublin, www.education.ie/en/Publications/Policy-Reports/lit_num_strategy_full.pdf.
- Dockett, S. and B. Perry (2014), *Continuity of Learning: A Resource to Support Effective Transition to School and School Age Care*, Australian Government Department of Education, Canberra.
- Dockett, S., B. Perry and E. Kearney (2011), "Starting school with special needs: Issues for families with complex support needs as their children start school", *Exceptionality Education International*, Vol. 21, pp. 45-61.
- Dockett, S. and B. Perry (2009), "Readiness for school: A relational construct", *Australasian Journal of Early Childhood*, Vol. 34, pp. 20-26.
- Dockett, S. and B. Perry (2003), "The transition to school: What's important?" *Educational Leadership*, Vol. 60/7, pp. 30-33.
- Dockett, S., and B. Perry (2001), "Starting school: Effective transitions", *Early Childhood Research and Practice*, Vol. 3/2.
- Dumčius, R., J. et al., (2014), "Study on the effective use of early childhood education and care in preventing early school leaving", Annex 1 Literature Review, No. EAC/17/2012, Publications Office of the European Union, Luxembourg.
- Dumont, H., D. Istance and F. Benavides (eds.) (2010), *The Nature of Learning: Using Research to Inspire Practice*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264086487-en>.
- Dunlop, A.W. and H. Fabian (2006), *Informing Transitions in the Early Years: Research, Policy and Practice*, Open University Press and McGraw Hill, Maidenhead, UK.
- Ebbeck, M. et al., (2013), "Children's Voices: Providing Continuity in Transition Experiences in Singapore", *Early Childhood Education Journal*, Vol.41, pp. 291-298.
- Eskelä-Haapanen, et al., (2016), "Children's beliefs concerning school transition", *Early Child Development and Care*, pp. 1-14, <http://dx.doi.org/10.1080/03004430.2016.1177041>.
- Einarsdóttir, J., (2007), "Children's voices on the transition from preschool to primary school, in *Informing Transitions in the Early Years: Research, Policy and Practice*. Open University Press and McGraw Hill, Maidenhead, pp. 74-91.
- Fabian, H. and A.-W. Dunlop (Eds) (2002), *Transitions in the Early Years. Debating Continuity and Progression for Children in Early Education*, RoutledgeFalmer, London and New York.
- Feinstein, L. (2003), "Inequality in the early cognitive development of British children in the 1970 cohort", *Economica*, Vol. 70, pp: 73-98.
- Finnish Ministry of Education and Culture (2016), *Finland Country Background Report on Transitions from ECEC to Primary School*, Department for General Education and Early Childhood Education, Helsinki, www.oecd.org/edu/school/SS5-country-background-report-finland.pdf.
- Fisher, J. (2009). " 'We used to play in Foundation, it was more funner': investigating feelings about transition from Foundation Stage to Year 1 ", *Early Years*, Vol. 29/2, pp. 131-145.
- Fitzpatrick C. and L. Pagani (2012), "Toddler working memory skills predict kindergarten school readiness", *Intelligence*, Vol. 40/2, pp. 205-212, <http://dx.doi.org/10.1016/j.intell.2011.11.007>.
- French Ministry of Education (2015), "La "mallette des parents", Un dispositif pour améliorer la communication entre les parents d'élèves et l'École" [The "parents' kit", A device to improve communication between parents and school], www.education.gouv.fr/cid53083/le-dispositif-mallette-des-parents.html#Qu'est-ce que la mallette des parents ?.

- French Ministry of Education (2016), “*La mallette des parents CP*” [The “parents’ kit” first graders], <http://eduscol.education.fr/cid59844/la-mallette-des-parents-cp.html#lien1>.
- Government of Japan (2016), *Japan Country Background Report on Transitions*, Government of Japan, Tokyo, www.oecd.org/edu/school/SS5-country-background-report-japan.pdf.
- Giallo, R., et al. (2010), “Making the transition to school: An evaluation of a transition program for parents”, *Australian Journal of Educational & Developmental Psychology*, Vol. 10, pp. 1-17.
- Giallo, R., M. Baschuk, J. Matthews. (2007), *Pilot Evaluation of the Ausparenting in Schools Transition to Primary School Parent Program*, Parenting Research Centre, Victoria.
- Hango, D. (2005). “Parenting investment in childhood and later adult well-being: Can involved parenting off-set the effects of socio-economicsocio-economic disadvantage?”, *Case paper 98*, London School of Economics, London.
- Hausken, E. and A. Rathbun (2002), “Adjustment to kindergarten: Child, family and kindergarten program factors”, Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
- Heckman, J. (2000), “Policies to foster human capital,” *Research in Economics*, Elsevier, Vol. 54/1, pp. 3-56.
- Hilppö et al., (2016), “Children’s sense of agency in preschool: a sociocultural investigation”, *International Journal of Early Years Education*, Vol. 24/2, pp. 157-171, <http://dx.doi.org/10.1080/09669760.2016.1167676>.
- Hirst, M. et al., (2011), “Transition to Primary School: A Review of the Literature”, Commonwealth of Australia, Canberra.
- Hopps, K. (2014), “Preschool + school + communication = What for educator relationships?”, *Early Years*, Vol. 4/34, pp. 405-419, <http://dx.doi.org/10.1080/09575146.2014.963032>.
- Hogsnes, H. D. and T. Moser (2014), “Forståelser av gode overganger og opplevelse av sammenheng mellom barnehage, skole og sfo” [Understandings of good transitions and perceived coherence between ECEC, primary school and after school programmes], *Nordisk barnehageforskning*, Vol. 7/6, pp. 1-24.
- Huerta M.C., et al. (2014), “Fathers’ leave and fathers’ involvement: Evidence from four OECD countries”, *European Journal of Social Security*, Vol. 16/4, pp. 308-346.
- Huf, C. (2013), “Children’s agency during transition to formal schooling”, *Ethnography and Education*, Vol. 8/1, pp. 61-76.
- Huser, C., C. Dockett, and B. Perry, (2016), “Transition to school: revisiting the bridge metaphor”, *European Early Childhood Education Research Journal*, Vol. 24/3, pp. 439-449.
- ISSA (2009), “Handbook of ECD Experiences, Innovations, and Lessons from CEE/CIS”, International Step by Step Association, Leiden.
- Jindal-Snape, D. (2010), “Setting the scene: Educational transitions and moving stories”, in *Educational Transitions: Moving Stories from Around the World*, Routledge research in education, Routledge, Abingdon.
- JSC IAC (Joint Stock Company Information-Analytic Center) (2017), *Kazakhstan Country Background Report on Transitions from ECEC to Primary School*, JSC “Information-Analytic Center”, Astana, www.oecd.org/edu/school/SS5-country-background-report-kazakhstan.pdf.

- Kagan, S.L. (1991), "The strategic importance of linkages and the transition between early childhood programs and early elementary school", in US Department of Education (1991), *Sticking Together: Strengthening linkages and the transition between early childhood education and early elementary school. Summary of a National Policy Forum*, US Department of Education, Washington, DC.
- Karlsson, L. and R. Karimäki (2012) *Sukelluksia lapsinäkökulmaiseen tutkimukseen ja toimintaan*. [Into the child perspective study and action] Jyväskylä: Suomen kasvatustieteellinen seura Kasvatustalan tutkimuksia.
- Kiernan, K.E. and M.C. Huerta (2008), "Economic deprivation, maternal depression, parenting and children's cognitive and emotional development in early childhood", *The British Journal of Sociology*, Vol. 59/4, pp.783-806.
- Kunnskapsdepartementet [Ministry of Education and Research] (2008), *Fra eldst til yngst*. [National guide. From the eldest to the youngest], Kunnskapsdepartementet, Oslo, www.regjeringen.no/globalassets/upload/kd/vedlegg/barnehager/veileder/f-4248-fra-eldst-til-yngst.pdf.
- Laloux, C. (2012), "Des organisations pédagogiques pour faire réussir les élèves à l'école maternelle" [Educational organisations to enhance children's success in pre-school], Direction des services départementaux de l'éducation national du Pas-de-Calais, Lille, France.
- Laewen, H. J.; B Andres and E. Hédervári (2003), "Die ersten Tage – ein Modell zur Eingewöhnung in Krippe und Tagespflege" [The first days – a model for familiarisation in ECEC centres and family day care], Weinheim.
- Leseman, P. et al. (2017), "Effectiveness of Dutch targeted preschool education policy for disadvantaged children: Evidence from the pre-COOL study", in *Childcare, Early Education and Social Inequality: An International Perspective*, Edward Elgar Publishing, Cheltenham.
- Lillejord, S., et al. (2017), "Transition from kindergarten to school: A systematic review", Knowledge Center for Education, Oslo.
- Little, M.H., L. Cohen-Vogel, F.C. Curran, (2016)," Facilitating the Transition to Kindergarten: What ECLS-K Data Tell Us about School Practices Then and Now", *AERA Open*, Vol.2/3, pp.1-18.
- Lipponen, L., K. Kumpulainen and J. Hilppö (2013), "Varhaiskasvatuksen pedagogiikka" [Want, I can, I am able: Children's Sense of Agency in Preschool], *Early Childhood Pedagogy*, Tampere: Vastapaino, pp. 159-175.
- LoCasale-Crouch, J., Mashburn, A.J., Downer, J.T., Pianta, R.C. (2008), "Pre-kindergarten teachers' use of transition practices and children's adjustment to kindergarten", *Early Childhood Research Quarterly*, Vol. 23, pp. 124-139.
- Malsch, A.-M., B.L. Green, B.H. Kothari (2011), "Understanding parents' perspectives on the transition to kindergarten: What early childhood settings and schools can do for at-risk families", *Best Practices in Mental Health: An International Journal*, Vol.7, pp. 47-66.
- Margetts, K. (2014), "Transition and adjustment to school" in *Transitions to school – International research, policy & practice*, Springer, Dordrecht.
- Margetts, K. (2013),"What new children need to know. Children's perspective of starting school" in *International Perspectives on Transition to School. Reconceptualising Beliefs, Policy and Practice*, Routledge, New York.
- Margetts, K. (2009), "Early transition and adjustment and children's adjustment after six years of schooling", *European Early Childhood Education Research Journal*, Vol. 17/3, pp: 309-324.

- Margetts, K. (2007), "Understanding and supporting children: shaping transition practices", in *Informing Transitions in the Early Years: Research, Policy and Practice*. Open University Press and McGraw Hill, Maidenhead, pp. 107-119.
- Margetts, K. (2003), "Does adjustment at preschool predict adjustment in the first year of schooling?", *Journal of Australian Research in Early Childhood Education*, Vol. 10/2, pp. 13-25.
- McWayne, C. et al., (2012), "National profiles of school readiness skills for Head Start children: An investigation of stability and change", *Early Childhood Research Quarterly*, Vol. 27, pp. 668-683.
- Ministry of Education, Science and Sport of the Republic of Slovenia (2017), *Slovenia Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education, Science and Sport, Ljubljana, www.oecd.org/edu/school/SS5-country-background-report-slovenia.pdf.
- National Scientific Council on the Developing Child (2004), "Young children develop in an environment of relationships", Working Paper No. 1, Centre on the Developing Child, Harvard University, Cambridge, Massachusetts, <http://developingchild.harvard.edu/wp-content/uploads/2004/04/Young-Children-Develop-in-an-Environment-of-Relationships.pdf>.
- Naudeau, S., et al. (2011), *Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation*. Africa regional educational publications, Directions in development; human development. World Bank, <https://openknowledge.worldbank.org/handle/10986/2525>.
- Nolan, A., et al. (2009), "Outcomes and Indicators of a Positive Start to School. Victoria University", Early Childhood Education Research Team, Melbourne.
- Norwegian Directorate for Education and Training (2017), *Norway Country Background Report on Transitions from ECEC to Primary School*, Norwegian Directorate for Education and Training, Oslo, www.oecd.org/edu/school/SS5-country-background-report-norway.pdf.
- NSW Government. (2016), The Transition to School: Literature review, Centre for Education Statistics and Evaluation.
- NSW Government. (2015), *Evaluation of the Transition to School Statement*, Centre for Education Statistics and Evaluation, www.cese.nsw.gov.au/images/stories/PDF/Transition_to_School_Report_final.pdf.
- OECD (2015a), *Skills for Social Progress: The Power of Social and Emotional Skills*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264226159-en>.
- OECD (2015b), *Integrating Social Services for Vulnerable Groups: Bridging Sectors for Better Service Delivery*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264233775-en>.
- OECD (2012), *Let's Read Them a Story! The Parent Factor in Education*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264176232-en>.
- OECD (2011), *Starting Strong III: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD (2006), *Starting Strong II: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264035461-en>.
- OECD (2001), *Starting Strong: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264192829-en>.
- OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264228368-en>.

- O’Kane, M. (2016), “Transition from preschool to primary school”, Research Report, No. 19, NCCA, www.ncca.ie/en/file/early/ResearchReport19_LR.pdf.
- O’Kane, M. and R. Murphy (2016a), *Transitions from Preschool to Primary school: An Audit of Policy in 14 Jurisdictions*, www.ncca.ie/en/file/early/International-Audit-Draft-11.pdf.
- O’Kane, M. and R. Murphy (2016b), *Transition from prePreschool to Primary School: Audit of Transfer documentation in Ireland*, www.ncca.ie/en/file/early/National-Audit-Draft-10.pdf.
- Peters, S. (2010), “Literature Review: Transition from Early Childhood Education to School”, Report to the Ministry of Education. Ministry of Education, Wellington, New Zealand.
- Peters, S. (2000), “The transition to school” in *Human Development in Aotearoa: A Journey through Life*, McGraw-Hill, Sydney.
- Pianta, R.C. and K.L. Harbers (1996), “Observing mother and child behavior in a problem-solving situation at school entry: Relations with academic achievement”, *Journal of School Psychology*, Vol. 34, pp. 307-322.
- Pianta, R.C., and M. Kraft-Sayre (1999), “Parents’ observations about their children’s transitions to kindergarten”, *Young Children*, Vol. 54/ 3, pp. 47-52, <https://eric.ed.gov/?id=ej586491>.
- Pianta, R.C., S.L. Nimetz and E. Bennett (1997), “Mother-child relationships, Teacher-child relationships, and school outcomes in preschool and kindergarten”, *Early Childhood Research Quarterly*, Vol. 12/3, pp. 263-280.
- Puccioni, J. (2015), “Parents’ Conceptions of School Readiness, Transition Practices, and Children’s Academic Achievement Trajectories”, the *Journal of Educational Research*, Vol. 108/2, pp. 130-147, <http://dx.doi.org/10.1080/00220671.2013.850399>.
- Queensland Government (2015a), Supporting successful transitions Information for families, Department of Education and Training.
- Queensland Government (2015b). Information for families. Department of Education and Training, <http://deta.qld.gov.au/earlychildhood/about/successful-transitions/info-families.html> (accessed 27 July 2016).
- Rambøll (2010), *Kartlegging av det pedagogiske innholdet i skoleforberedende aktiviteter i barnehager* [Mapping of the Pedagogical Content in School-Preparatory Activities in Kindergartens], Rambøll Management Consulting.
- Ramey, C.T., et al., (2000), “Persistent effects of early childhood education on high-risk children and their mothers”, *Applied Developmental Science*, Vol. 4, pp. 2-14.
- Rimm-Kaufman, S.E. and R.C. Pianta (2000), “An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research”, *Journal of Applied Developmental Psychology*, Vol. 21/5, pp. 491-511.
- Schulting, A.B., (2008), “Promoting parent-school relationships during the transition to kindergarten”, *The Evaluation Exchange*, Vol. 14, www.hfrp.org/evaluation/the-evaluation-exchange/issue-archive/building-the-future-of-family-involvement/promoting-parent-school-relationships-during-the-transition-to-kindergarten.
- Schulting, A.B., P.S. Malone and K.A. Dodge, (2005), “The effect of school-based kindergarten transition policies and practices on child academic outcomes”, *Developmental Psychology*, Vol. 41, pp. 860-871.
- Scottish Executive (2007), “A Curriculum for Excellence. Building the Curriculum 3-18”, Active Learning in the Early Years, Scottish Executive, Edinburgh.

- Scottish Government (2016), “Language Development and Enjoyment of Reading: Impacts of Early parent-child activities in Two Growing Up in Scotland Cohorts”, Scottish Government, Edinburgh.
- Shonkoff, J. P. and D.A. Phillips, (2000), *From Neurons to Neighborhoods: The Science of Early Child Development*, National Academy Press, Washington D.C.
- Siraj-Blachford, I. et al. (2008), “Towards the transformation of practice in early childhood education: the effective provision of pre-school education (EPPE) project”, *Cambridge Journal of Education*, Vol. 38/1, pp. 23-36.
- Sivertsen, H., et al. (2015), *Spørsmål til Barnehage-Norge 2014. Trøndelag Forskning og Utvikling*. [Questions for kindergartens in Norway 2014], www.udir.no/tall-og-forskning/finn-forskning/rapporter/Sporreundersokelse-blant-barnehagestyrere-og-barnehageeier-hosten-2014/.
- Skolverket (2011), Curriculum for the compulsory school, preschool class and the recreation centre 2011, Swedish National Agency of Education, Stockholm, www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpbext%2Ftrycksak%2FRecord%3Fk%3D2687.
- State Government of Victoria (2009), “Transition: a positive start to school. A guide for families, early childhood services, outside school hours care services and schools”, Early Childhood Strategy Division, Office of Children and Portfolio Coordination, Department of Education and Early Childhood Development, Melbourne.
- Stipek, D., et al. (2017), “PK-3: what does it mean for instruction?”, *Social Policy Report*, Vol. 30/2.
- Strandell, H. (2010), “From structure-action to politics of childhood: sociological childhood research in Finland”, *Current Sociology*, Vol. 58/2, pp. 165-185.
- Swedish Ministry of Education and Research (2017), *Sweden Country Background Report on Transitions from ECEC to Primary School*, Ministry of Education and Research, Stockholm, www.oecd.org/edu/school/SS5-country-background-report-sweden.pdf.
- Swedish Schools Inspectorate (2015), *Undervisning i förskoleklass* [Teaching in pre-school class], www.skolinspektionen.se/sv/Beslut-och-rapporter/Publikationer/Granskningsrapport/Kvalitetsgranskning/undervisning-i-forskoleklass/, Skolinspektionen, Stockholm.
- Sylva, K. et al. (2004), “The effective provision of pre-school education (EPPE) project”, Institute of Education, University of London, London.
- Sylva, K. et al. (2003), “The effective provision of preschool education (EPPE) project: Findings from the preschool period”, Institute of Education, University of London and SureStart, London, England.
- Turunen, T. (2012), “Individual plans for children in transition to preschool: A case study in one Finnish day-care centre”, *Early Child Development and Care*, Vol. 182, pp. 315-328.
- UNESCO Institute for Statistics (2015), “ISCED mappings”, <http://uis.unesco.org/en/isced-mappings> (accessed on October 2016).
- Utdanningsdirektoratet [Education Directorate] (2014), *Veileder: Overganger for barn og unge som får spesialpedagogisk hjelp eller spesialundervisning* [Supervisor: Transitions for children and young people who receive special education assistance], www.udir.no/laring-og-trivsel/sarskilte-behov/overganger-.
- Van Voorhis, F.L. et al., (2013), “The impact of family involvement on the education of children ages 3 to 8: A focus on literacy and math achievement outcomes and social-emotional skills”, MDRC, www.mdrc.org/sites/default/files/The_Impact_of_Family_Involvelement_ES.pdf.

- Vibe, N. (2012), "Spørsmål til skole-Norge", [Questions for schools in Norway 2011] NIFU, www.udir.no/tall-og-forskning/finn-forskning/rapporter/Sporreundersokelse-til-skoler-og-skoleiere-hosten-2011/.
- Waldfogel, J. (2006), What do children need?, Harvard University Press, Cambridge, Massachusetts.
- Welsh Government (2017), *Wales Country Background Report on Transitions from ECEC to Primary School*, Welsh Government, Cardiff, www.oecd.org/edu/school/SS5-country-background-report-wales.pdf.
- Welsh Government (2015), Evaluating the Foundation Phase: Final Report, Government Social Research, Cardiff, <https://orca.cf.ac.uk/88984/1/150514-foundation-phase-final-en.pdf>.
- Welsh Government (2014), "How is my Child Doing in the Foundation Phase. A guide for parents and carers", Welsh Government, Cardiff, <http://gov.wales/docs/dcells/publications/140707-how-is-my-child-doing-in-the-foundation-phase-en.pdf>.
- Welsh Government (2013a), National Evaluation of Flying Start: Impact Report, Children, Young People and Families Division, Cardiff, <http://gov.wales/docs/caecd/research/131205-national-evaluation-flying-start-impact-report-en.pdf>.
- Welsh Government (2013b), "Flying Start qualitative research with high need families", Government Social Research, Cardiff, <http://dera.ioe.ac.uk/19094/3/131014-flying-start-qualitative-research-high-need-families-en.pdf>.
- Zaslow, M., et al. (2004), "The Role of Professional Development in Creating High Quality Preschool Education (Welfare Reform and Beyond Working Paper)", Brookings Institution, Washington, DC.

Chapter 6

Policy pointers to improve transitions from early childhood education and care to primary school

Traditionally, the “transition to school” has been interpreted as being all about “school readiness”, whereby the early childhood education and care (ECEC) setting should prepare children for the school environment. However, recent advances in neurological research, developmental psychology and learning science all suggest the need for school environments to themselves be more developmentally age-appropriate. This implies that reform is also needed in primary schooling to ensure that the benefits to young children of high-quality ECEC endure and can be built upon in the school environment. While ensuring effective transitions is the responsibility of many people, policy makers have a particular role to play. This includes creating the supportive structure and frameworks required across government, in teacher training and educational institutes, and in the administrative mechanisms within which effective transitions can occur. This chapter distills six cross-cutting themes from the thematic chapters of the report that can be considered by policy makers and adapted to their own contexts.

The data collected through the OECD questionnaire on transitions for Italy is published here under the responsibility of the National Institute of Evaluation of the Educational and Training System (INVALSI, Istituto nazionale per la valutazione del sistema educativo di istruzione e di formazione).

Introduction

As the preceding chapters have shown, countries are implementing a wide range of strategies, policies and practices to ensure continuity between and across various aspects, including governance (Chapter 2), professional continuity (Chapter 3), curriculum and pedagogical continuity (Chapter 4), and developmental continuity (Chapter 5), all of which are interdependent. Each of the chapters has provided detailed theme-specific policy pointers. This final chapter draws out six key cross-cutting policy pointers to guide and inspire policy makers aiming to ensure continuity in transitions in their countries or jurisdictions:

- 1) Focus on making schools ready for children, not only children ready for school
- 2) Dispel some common myths and misconceptions surrounding transitions
- 3) Overcome structural roadblocks to co-operation and continuity
- 4) Encourage local leadership, backed up by a clear national policy framework
- 5) Mainstream transition into equity measures
- 6) Support transition research and monitoring to improve policy

Focus on making schools ready for children, not children ready for school

Transitions are often linked to the term “readiness”, which in many countries refers to a child’s “readiness for school”. To make children “ready”, the approach often taken involves exposing children who are still in ECEC to the culture of primary school. Research points out that the greater the gap between the culture of the school and the culture of the early years setting, the greater the challenge to the child and the greater the risk of not being able to understand the requests of primary school (Fabian and Dunlop, 2006). To address this challenge, some countries expose the child to the culture of the school already in ECEC, to familiarise the child with primary school as early as possible. This approach raises concerns over increased “schoolification” of early childhood settings (see Chapter 1). “Schoolification” refers to changing ECEC settings into adopting practices that are usually more related to primary school, i.e. the “trickling down” effect of school pedagogical practices to settings that provide early education and care before compulsory primary school starts. Examples include higher staff-pupil ratios, more hours spent away from home, more teacher-directed pedagogies, greater attention to academic content or less playtime, imposing children to sit still at their desk and be quiet.

Change how “school readiness” is interpreted

However, more recent research is highlighting the importance of developmentally appropriate practices based on children’s age and developmental stage (See Chapter 1, Box 1.2). The more age- and child-appropriate the pedagogical practices are, the greater the effect on children’s social and cognitive development (Litjens and Taguma, 2010; OECD, 2012). Thanks to this research, in recent years, the “readiness” rhetoric is changing. Today, there is a growing perception that it is no longer for ECEC alone to prepare children for school; schools also need to be ready for children coming from the ECEC environments. Research suggests that minimising the amount of change children and parents or guardians (see Box 5.1 in Chapter 5 for information on terminology) experience in the recipient culture could be an alternative way to enhance transition, alongside making efforts to prepare children for changes in classroom practices (Stipek et al., 2017). The researchers call for the need to ensure psychological safety and comfort to children of that age group to ensure children’s self-confidence and self-efficacy, which are often strong predictors for later and wider student outcomes. Indeed, some countries have started to regard “readiness” as not only “readiness for school/life” but also “a school’s readiness for the child”. In the Nordic countries, this has been the main approach for

some time. A successful transition not only ensures that a child is ready to leave the ECEC setting and start primary school, but makes sure that the ECEC setting the child is leaving, as well as the school the child will attend, are prepared for the transition. This suggests the need for primary schooling to also collaborate with ECEC for better “readiness” for children.

Put the child at the centre

Policy makers need to embrace the idea that collaboration and co-construction of transition should be shared by all the agents in the transition process, including teachers and educators, parents and the community, and children (Fabian and Dunlop, 2006). Recent research acknowledges children are increasingly considered to be “agents”, as even young children are active social learners and decision makers who are capable of understanding and contributing their opinions on a range of issues affecting them (Fabian and Dunlop, 2006; Vogler et al., 2008). Indeed, in the growing number of studies focusing on transitions, the child is increasingly studied from the perspectives of development and adaptation. More recent research puts the child at the centre. Research in Finland, for example, suggests that children’s role as agents in the context of transition is key for developing children’s competencies and capabilities. If the child is an active participant in aspects that matter in her/his life, she/he can commit more deeply to the activities required (Lipponen et al., 2013).

Similarly, Ackesjö (2013) argues that understanding children’s perspectives on how they experience the transition is essential for developing suitable transition practices. When transitions are based on children’s perspective, interests, motives and questions, they help to make the transition transparent and to give children and parents a sense of continuity. Listening to children and their experience helps to better understand the challenges they face and helps to improve the support given by parents, pedagogical staff in ECEC settings and schools. Listening to children also enables to acknowledge that the preschool-primary school transition, if well managed by adults, can be an opportunity for children’s growth and socialization (Corsaro & Molinari, 2008).

Although children’s views are increasingly being taken into account, children are still rarely active participants in studies on transitions. Hence, little is known about their expectations and fears of forthcoming transitions or of their actual experience.

Ensure that compulsory education entry and curriculum frameworks are age appropriate

Discussion on age-appropriateness often stimulates debate, e.g. on the age at which primary schooling or compulsory education should start. In the majority of countries, primary schooling starts at the age of six, with a few exceptions (e.g. five in Australia and the United Kingdom, and seven in Denmark, Finland, Poland and Sweden). In most countries, compulsory education starts at the same age as or earlier than the starting age of primary schooling. When compulsory education starts earlier than primary schooling, in most countries it is one year earlier (e.g. at five in Chile, Greece and the Netherlands, and at age six in Denmark, Finland and Poland). In a few countries, compulsory education starts even earlier (e.g. at four in Luxembourg and Switzerland and at three in Hungary and Mexico). The aim is to ensure participation in ECEC without lowering the starting age of primary schooling, so as to manage concerns about “schoolification”.

In Sweden, a recent debate focused on whether preschool class at age six should be made mandatory while remaining a separate transition year bridging preschool and compulsory school, or whether it should be replaced by a mandatory 10-year compulsory school with a starting age of six years. The government is currently considering making the preschool class mandatory from the autumn of 2017.

Another area of debate is the age range that should be covered by a curriculum framework. Wales (United Kingdom) is reorganising its curriculum and assessment arrangements to provide a

more coherent curriculum programme and a smoother progression from 3 to 16 years, compared to the current curriculum which is organised into phases. The reform will include changes to initial teaching training, workforce development and to the curriculum and assessment arrangements. A growing number of countries are reframing their age-groupings in their ECEC and primary curricula. In the United States, for example, the traditional “K-12” framework has been revisited and there is a movement, often called “PK-3” or “0-8” to highlight the importance of creating stronger connections between ECEC and elementary school while not losing the positive effects of ECEC intervention. In Ontario, Canada, while separate curricula cover ages 4-5 (*Kindergarten Programme 2016*) and 6-14 (*The Ontario Curriculum Grades 1-8*), a pedagogical document, *How Does Learning Happen? Ontario’s Pedagogy for Early Years* (2014), covers the age spectrum from birth to eight. In Italy, the curricular framework covers the 3-14 age range and it includes a specific paragraph on continuity and on the unitary “vertical” curriculum. In the Netherlands, the curriculum “Core Objectives” covers the age range of 4-12 year-olds.

In Austria, the last year of ECEC and the first two years of primary school (covering ages five to seven) will form a new “joint school-entry phase”. This new, three-year transition phase creates a structure for co-operation and will ensure that important knowledge gained in ECEC is not lost, but rather used to facilitate integration at primary school.

Dispel some common myths and misconceptions surrounding transitions

The underlying issue for many of the challenges cited in the chapters in this report – fragmented coherence and lack of consistency of goals, curriculum, pedagogical practices between the two sectors and lack of cooperation and collaboration among actors – is rooted in the differences of perceptions, ideologies, philosophies and expectations about “transitioning” held by the actors participating in transitions, including policy makers, ECEC staff, primary school staff, parents, municipality leaders, and other child development services. First and foremost, the concept of “transitioning” needs to be better understood. It is **multi-directional**, not a requirement for ECEC to align with primary education; it is a **dynamic change process**, not a snapshot of a point in time; it is a **shared responsibility of all stakeholders**, not that cooperation between ECEC and primary school can address all issues.

View transitions as multi-directional

One of the most frequently held misconceptions is that the transition is a one-way street, that is, ECEC is responsible for preparing children for school. In fact, transitions are part of the holistic early development experience and thus should not be regarded as an individual part of the education system, or the sole responsibility of ECEC. Research suggests that the impact of early educational experiences may be affected heavily by the subsequent quality of school learning experiences (Burchinal et al., 2002; Magnuson et al., 2007), not only by the early learning experiences. Therefore, it is important to align the early years of primary schools with ECEC to reduce the risk of “fade-out” effects. Children’s experience in ECEC should be followed up with good quality experiences during the first years of primary school.

The majority of jurisdictions report that both ECEC staff and primary-school teachers work together to share information on individual child development and children’s experiences (see Table 1.5, Chapter 1). Collaboration and communication are very important for ECEC staff and primary teachers to have a mutual understanding of each other’s work and expectations. Denmark states that broad objectives for ECEC and the target goals for primary schools should be developed in line with each other. This is expected to create more common ground, which will result in better understanding of each other’s methodologies and purposes, and ultimately create better coherence between ECEC and school. Denmark indicated that the lack of shared

knowledge between staff in ECEC and primary school about the ideas, values and methods in schools and ECEC, such as differences in pedagogy, philosophy and practices, can make collaboration difficult.

Slovenia and Norway also believe that when the objectives of early education and primary school are (more) aligned and clearly communicated, this can benefit the collaboration between the two settings and can support the implementation of transition practices. In Slovenia, for instance, even though the ECEC and school curricula were developed during the same curricular reform (1996-1999) and share the same principles and framework, there are differences in perspectives on the objectives of ECEC and primary schools, which makes cooperation between the different settings harder. As a consequence, these different settings often do not communicate with each other (unless in the process of establishing the child's school readiness) or do not attempt to strengthen their collaboration, although lately there have been attempts in some settings. This suggests that training for both ECEC and school staff on understanding the objectives of transition, and trying to strengthen and align these more, could also help transitions.

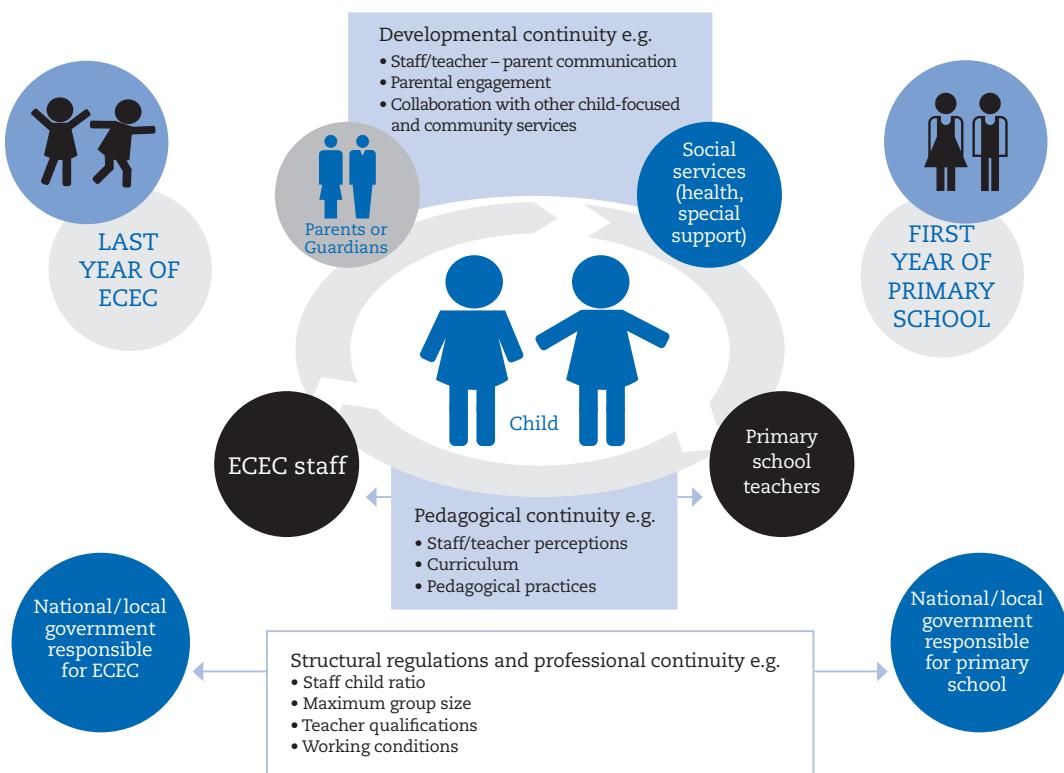
Initial education and training is the first opportunity for professionals to learn about each other's professional contexts and to start to understand themselves as equal collaborators. In the majority of jurisdictions, training on transitions is common during initial education and in-service training, in particular for ECEC staff (see Table 1.5, Chapter 1). While aligning qualification levels of staff in both educational sectors may require a longer planning period, rolling out joint professional development for both levels can be an important first step, particularly if it includes training on transitions. In doing so, it is pivotal to avoid any hierarchy between the two groups and allow both sides sufficient time for preparation and participation. The ECEC approach can be as informative for the beginning of primary school as the other way around, ensuring that children are being picked up where they stand rather than where they are expected to stand. Thus measures to level the playing field for mutual benefits can be a key ingredient in improved collaboration. For instance, in Finland ECEC staff and primary education teachers receive training on transitions during initial education, which promotes greater consistency in transition activities and facilitates collaboration across sectors.

View transitions as dynamic change processes

Transition is a holistic concept, involving not merely the facilities the child moves away from and transits to, but also the child themselves, their parents, social services, ECEC staff, primary school teachers, and national and local authorities. As we saw in Chapter 5, the transition experience, as with any other learning experience, is shaped by multiple factors in the child's learning context (OECD, 2012). The involvement of and collaboration among parents, ECEC settings, primary schools and other early years' services are key for a positive influence on children's developmental continuity and transit to school (Figure 6.1; and see Rimm, Kaufman and Pianta, 2000; Bronfenbrenner, 1994; Bronfenbrenner 1986). In line with the ecological and dynamic models of transitions, Ahtola et al. (2011a) conclude that the child must be surrounded by a "web of relationships" whereby all participants influence each other and each of them facilitates children's transitions between two different learning environments (Lillejord et al., 2017).

Some participating countries have set up working teams to enhance collaboration among professionals of different sectors. In the Netherlands, a good example of close collaboration between ECEC settings and primary schools are the "startgroepen". These enable collaboration on ensuring continuity in children's development; offering similar programmes, aligning goals, etc. These collaborations are monitored and evaluated by researchers, who have noted positive results.¹

Figure 6.1 Multiple factors and connections are at play in transitions



View transitions as the shared responsibility of all actors

Strong, trustful and respectful collaboration between parents and ECEC settings and schools can help ensure a smooth transition to school by co-developing children's competencies and learning dispositions. However, sharing child development information with parents is a practice that is still much more prevalent in preschool than in primary school (see Table 1.5, Chapter 1). Despite important steps in enhancing parental involvement on transitions, further efforts are needed, especially to reach families from disadvantaged backgrounds. Participation of these types of families is more difficult, given the number of obstacles they face to take an active role in children's learning and development. Jurisdictions recognise the need of further developing practices to involve parents from vulnerable groups, especially given increasing diversity due to migration. Misconceptions of the role of ECEC and lack of awareness of the importance of the transition process also hinder parental engagement. The rationale, goals and tasks of the transition programme should be clearly explained to parents. Countries should consider adapting their policies to parents needs and provide multiple opportunities for parents to participate in transition activities.

In Norway, there is broad agreement that a good transition between kindergarten and school depends on both institutions facilitating a holistic education that ensures the individual child's need for safety and continuity. This means that preparations for school must have a broad perspective and be seen in connection with the child's surroundings, family, peers, kindergarten and school. A 2016 White Paper to the Norwegian parliament on the content of ECEC – *Time for Play and Learning* addressed, among other themes, the topic of transitions. This has fed into the country's revised *Framework Plan for the Content and Tasks of Kindergartens*, which is to be implemented in August 2017. The framework clearly states that kindergartens should facilitate children's transition to school in collaboration with schools and in co-operation with parents.

Overcome structural roadblocks to co-operation and continuity

Countries need to improve the structural conditions to support ECEC and primary school staff's co-operation around transitions. In the majority of countries (11 out of 19), pre-primary school teachers spend more time in direct contact with children, leaving them less time for other duties such as preparation and co-operation than their primary school peers (see Table 1.5, Chapter 1). These longer on-site hours for ECEC staff were cited as a challenge to co-operation. There are other structural factors that also need to be addressed. For example, the logistical barriers for co-ordination are greater if ECEC centres and primary schools are not located in the same place. Furthermore, the discrepancies in ECEC staff and primary school teachers' salaries, working conditions and level of qualifications in many countries (see Table 1.5, Chapter 1) explain in great part the tensions across sectors and the limited co-operation.

Create conducive working conditions for staff to focus on transitions

Apart from their education, there are external factors (such as the working environment, salary and work benefits) that matter for ECEC staff's sense of self-efficacy and their ability to meet children's needs (Shonkoff and Philips, 2000; Chapter 3). Staff need to believe in their effectiveness, and feel able to organise and execute the courses of action needed to achieve desired results in the class or playroom (Fives, 2003). Wages are one of the most relevant factors affecting working conditions, job satisfaction and teachers' effectiveness (Huntsman, 2008; Moon and Burbank, 2004; Murnane and Olsen, 1990). There is evidence that low wages in ECEC affect staff behaviour towards children and increase turnover rates, which has a negative impact on transitions (Huntsman, 2008).

If transitions practices and cross-institutional cooperation are to be seen as success stories rather than as additional administrative requirements, staff need to be able to take on their transition-related roles during their regular working time and with specialist support where needed. The use of special counsellors, such as in Slovenia, and several countries' success in bringing pre-primary and primary teachers' time allocations into line, may provide sources of inspiration to other countries (OECD, 2016a; Slovenia Country Background Report).

Address the physical factors hindering co-ordination

A physical integration of centres and schools may support inter-sectoral co-operation, as the examples of integrated schools or campus models suggest (e.g. Wales (United Kingdom), Austria and many northern European countries). In the majority of jurisdictions (65.9% or 27 of 41 jurisdictions), pre-primary education is provided in the same building or on the same premises as the primary school (Table 2.2, Chapter 2). This may soften the transition to school as children usually do not have to change building and are already familiar with the space and rooms, as well as with the staff. Moreover, the monitoring of child development may become more continuous as information can more easily be shared and methodologies more easily aligned. If ECEC children move on to a variety of different schools, additional local structures, such as transition co-ordinators or counsellors, may be needed to ensure information flows between various institutions.

Place an emphasis on good leadership

Leadership is an issue cutting across the different challenges and strategies highlighted in the chapters of this report. Leadership is pivotal for supporting staff and teachers, and making transitions work well for children (Chapter 3). Leaders affect setting quality through staff composition (hiring and firing staff) and through staff professional development opportunities (Branch et al., 2009). Leadership can also foster a high level of staff quality by motivating and encouraging team work and the sharing of information (OECD, 2006; 2012). Research finds that in primary schools in which principals are engaged in instructional leadership, teachers more often collaborate and engage in

reflective dialogue, as well as in practices where teachers observe other teachers' classes, and have a shared sense of purpose (OECD, 2016b).

In most countries the responsibility for managing successful transitions is mainly in the hands of individual centre leaders and school principals, who act as role models for staff. Some of them may even be seen "as visionaries and motivators for a joint concept on transition" (Austria Country Background Report). ECEC managers and primary school principals who want to ensure smooth transitions need to be knowledgeable about the latest reforms and policies and how they can affect the implementation of transitions. They should also be knowledgeable about the importance of early childhood education (Desimone et al., 2004), particularly since collaboration over transitions with other institutions and decisions on professional development are often their responsibility.

It is crucial that settings leaders have the means to understand staff needs and enable them to take part in on-site and off-site training programmes when additional development is needed. They can also make the strategic choice to bring in additional support or specialist staff when needed. For all of these tasks, leaders not only need to be highly skilled, but they also need a clear legal environment for their work – such as for the sharing of information on children as in Wales (United Kingdom) and Austria. They also need support to exercise their role effectively, for instance with the help of counsellors such as in Slovenia.

Ensure a supportive legal framework for transitions

Structural hurdles may also be of a legal nature: several countries reported challenges linked to the exchange of information on individual children and child records between ECEC centres and primary schools, rendering individualised transition support and co-operation more complicated. Providing accommodating legal environments, such as provisions for the exchange of child records in Wales (United Kingdom), and allowing staff sufficient time to co-operate can be an important step forward.

Denmark is one of few countries where the broad goal of transitions is specified in a law. The Act on Day Care Facilities, introduced in 2007, mentions that one of the purposes of ECEC is to create coherence and continuity between facilities and make transitions between facilities coherent and age-appropriately challenging for the children. In Slovenia, transitions are reflected in the *Organisation and Financing of Education Act*. This act mentions that one of the objectives of education in Slovenia is ensuring the optimal development of an individual regardless of their gender, social or cultural background, religion and ethnicity. A good transition to school is part of this "optimal development" thinking. By law, ECEC provisions and schools are supposed to collaborate to achieve this, and their co-operation should be explained in schools' annual work plans.

Encourage local leadership, backed by a clear national policy framework

In federal countries there can be large regional differences in curriculum content, pedagogical concepts, or minimum standards as the responsibility for regulations, design and/or content lie with state governments. In most other countries, responsibilities for transitions are with local authorities or the provider (see above). This may also complicate support for children transitioning from an ECEC setting to school as standards for ECEC and primary education settings may vary widely between states. When ECEC is offered mainly by private providers the co-ordination between ECEC and primary school settings or between different levels of authorities may be even more complex.

Where settings themselves have autonomy in deciding how transitions are taken care of, the result can be a wide range of practices with little alignment between them. In Austria for instance, because of the decentralised ECEC system, ECEC settings often do not co-operate with primary schools. Denmark and Norway also highlight that the decentralisation of transition responsibilities

results in variations between municipalities in how transitions are handled, and thus, in varying levels of transition quality.

On the other hand, transition policies and practices that consider and are adapted to particular contexts and individual needs are more likely to be effective in promoting a smooth start in school (Hirst et al., 2011; Peters, 2010). There is a need to raise awareness of the importance of transitions at the national level, while fostering local leadership and ownership of transitions fit for local needs, including different cultural and socio-economic backgrounds, societal needs, and (parental) expectations in particular contexts. Many countries provide national guidelines on transitions, but they do not prescribe specific practices on how to involve the different stakeholders. This freedom to organise the transition activities at the local level has a range of benefits, but it also results in variations between municipalities, ECEC settings and schools on how they handle children's transitions.

Develop a national plan, strategy and guidelines to encourage coherence in transitions

Several countries have developed ways of ensuring greater coherence across local levels in how transitions are organised. They have done so by creating national plans, strategies and guidelines that can be followed at the local level.

For example, Wales (United Kingdom) was finding that the Foundation Phase curriculum framework for three to seven-year-olds was not being implemented everywhere coherently, resulting in variations in quality, in transitions and in how the framework was used. In response to this issue, a *Foundation Phase Action Plan*² was developed and published in late 2016. The plan consists of a number of approaches to improve consistency across ECEC and primary schools. These include updating training of staff, improving initial teacher training, providing further parental engagement support materials, and school-to-school support.

Austria has developed a cross-national strategy to facilitate co-operation between ECEC and schools to strengthen transitions (Box 2.6, Chapter 2). Many stakeholders were involved in the development phase of this strategy, which is expected to ensure good guidance for settings involved in transitions, and should improve the co-ordination of school entry.

Combine national and local leadership

Many countries take a combined approach, encouraging national and local leadership (see Table 2.4 in Chapter 2). In Wales (United Kingdom), the Welsh Government takes an overarching strategy for breaking the links between poverty and deprivation (*Rewriting the Future*), while delegating leadership to Regional Education Consortia to support schools to take forward key priorities at the local level. Norway is highly decentralised, with municipalities taking the responsibility for ECEC and primary school while the national government makes strategic decisions to ensure effective transitions for all children. The government has made various efforts, including the transfer of responsibilities of ECEC from the Ministry of Children, Equality and Social Inclusion³ to the Ministry of Education and Research in 2006 to strengthen the coherence between ECEC and school. To ensure leadership and cooperation at the local level, the newly revised *Framework Plan for the Content and Tasks of Kindergartens* accentuates the ECEC leader's responsibility to ensure coordination between the various services provided to families with children. A national guide on transitions also supports local actions and leadership on transitions.

Ireland takes a national inter-departmental approach. The Department of Education and Skills and the Department of Children and Youth Affairs have made good transitions an objective of education provision as part of the *National Strategy to Improve Literacy and Numeracy 2011-2020*. The *National Curriculum Framework (Aistear)* and the quality framework for early childhood (*Síolta*)

both devote considerable attention to the topic of transitions and provide numerous resources such as an online self-evaluation tool. It is now a requirement for ECEC settings and schools to collaborate and transfer information on children's learning and to enhance the quality of transitions. For this, transition templates are being piloted. Other proposed activities include the establishment of local networks, the dissemination of information to families, reciprocal visits by primary and preschool staff and children to schools and preschools and the development of materials and books to support children with the transition process.

In the Netherlands, the national government facilitates and supports local leadership. The Ministry of Education has drawn up agreements with the 37 largest municipalities on the goals of "vve" (*voor en vroeg schoolse educatie*), targeted, free programmes for disadvantaged children, spanning the preschool and kindergarten ages to support children during the transition stage. The government also provides extra funding to enable the municipalities to achieve their goals. A recent study shows that because of extra funding to these municipalities, transitions between ECEC and school have significantly improved (CPB, 2016). In addition, the number of boys in the first years of primary education who have to repeat a school year has significantly decreased, indicating that these activities are helping boys become more ready for school during their ECEC years.

Mainstream transition into existing equity measures

While strong transitions are important for all children, they are especially important for disadvantaged children as they are at a greater risk of developmental losses. Low-quality transitions often affect more children from disadvantaged backgrounds than their better-off peers (Isaacs, 2008; Melhuish et al., 2015). PISA findings show that the probability of low performance in mathematics is largely the result of cumulative social and economic disadvantages (OECD, 2016b). Missing out on pre-primary education affects disadvantaged children more than it affects advantaged children. On average across OECD countries, a socio-economically advantaged student who did not attend has an 8% probability of low performance in mathematics, whereas a disadvantaged student who did not attend pre-primary education has a 25% probability of low performance. This gap increases with the accumulation of other risk factors such as immigrant background, not speaking language spoken at school at home, living in a single-parent family (OECD, 2016b). Currently, children with the following backgrounds or learning needs are likely to receive support during the transition stage as part of the equity programmes:

- with parents with low income or educational backgrounds
- with parents with immigrant, traveller or indigenous backgrounds (suggesting language and cultural differences)
- with parents living in poor areas or regions (suggesting low social and cultural capital in the community and, often, dysfunctional communities)
- with special needs because of (mental or physical) health issues.

These background factors are often found to overlap and, when they do, the process of transitions for the child will become far more complex as it involves multiple hindering factors, suggesting bigger social, economic and cultural differences between the environments of the child at home, and that of ECEC and of primary schooling. Thus, the magnitude of challenges becomes larger, calling for systemic interventions involving all actors from relevant public services, e.g. not only ECEC and primary schools, but also community and family services, health and social services. Research has shown that children's early school adjustments, including higher levels of social skills and academic competence, in particular those of disadvantaged children, are enhanced when both children and families participate in "comprehensive transition programmes"⁴ (Margetts, 2007). It is important that transition challenges for these children should be properly understood and transitions should be mainstreamed into various equity measures.

Provide comprehensive equity measures

In Wales (United Kingdom), tackling poverty has been a high policy priority for the past decade. It has developed the 2011 *Child Poverty Strategy*, followed by a revised strategy to reaffirm the government's ambition to eradicate child poverty by 2020. The government recognises that child poverty does not exist in isolation. It has therefore carefully designed key programmes that fit together as a comprehensive package. ECEC and transitions are embedded in these programmes. For example, a new *Additional Learning Needs Act* was introduced to strengthen the role of local authority nurseries and settings in supporting children with additional learning needs, and a new code accompanying the act will contain guidance on transitions for those with additional learning needs. The *Rewriting the Future* strategy sets out a range of actions to reduce the student attainment gap between children from the most deprived background and their peers. The strategy is supported by a *Pupil Deprivation Grant*, which funds coordinators who can help with the transition of children with special educational needs or additional learning needs at each school; staff dedicated to work with families experiencing difficulties or children from disadvantaged backgrounds in larger primary schools; free school meals, including for three and four year olds. Furthermore, the "Flying Start" programme was designed to provide free quality childcare to parents with children of two and three year olds living in disadvantaged areas. The policy objective is to increase the proportion of three year olds achieving or exceeding their developmental milestones by 5 percentage points, and is backed up by a curriculum framework. The sector is still poorly paid in the UK, which makes it challenging to ensure a sufficiently skilled workforce, in particular in the poorest communities. Thus, the curriculum framework can help even the least-skilled ECEC staff to understand the milestones as well as to learn to work with children of disadvantaged families, including in transitions (Welsh Government, 2014).

Direct financial measures to children with the greatest needs

In some countries, fees for ECEC services often become a financial burden for parents. If children do not participate in ECEC because families cannot afford it, there is a risk the children with disadvantaged background will fall behind before they start schooling and there will be larger cultural differences between their homes and primary schooling. In the majority of OECD countries, pre-primary education is free of charge for all families. In countries which charge parents fees for pre-primary education, there are usually some targeted measures, such as waiving fees for low-income families. Japan aims to lower the financial burden of ECEC for households by matching the fees to parents' income level, halving the fees for the second child, and making ECEC free for every third or further child. Additionally, low-income households can receive further financial aid. Furthermore, to ensure that more children can benefit from formal early learning experiences, some municipalities may dispense with parental fees for ECEC altogether. Some municipalities also provide financial aid for families in need, e.g. covering the costs of school supplies, transport, and lunches. In Finland, fees depend on the number of children in the family and their income, as well as the time spent in ECEC. In Denmark, parents with income below a certain threshold receive both a general subsidy for a place in ECEC and an "aided place subsidy" from the local authority.

Focus on special learning needs

Children with language difficulties are more likely to face obstacles when learning to read in primary education, regardless of the teaching method (Laloux, 2012). One of Austria's main country-wide objectives is to stimulate language development, which is indirectly linked to the topic of transition into primary school. In 2008, an agreement was ratified between the federal government and the federal states to introduce mandatory early language learning support in early learning provisions. Kindergarten and school teachers have to assess language development to define what language learning support is needed for children with a poor knowledge of German so as

to facilitate children's entry and transition into primary school, and to create better conditions for future education and employment opportunities. In Slovenia, parents of children with special needs are supported by law, the Placement of Children with Special Needs Act, which provides an opportunity to participate in expert-team meetings to discuss the development of their child and to plan the transition to school.

Support parents from disadvantaged backgrounds

Participation in transition activities by migrant parents and indigenous families is found to be more difficult to achieve. Countries have made efforts to reach this group of families by adapting support materials to their language, and training staff to work with and support these families. Further efforts need to take parental background elements into account to increase the chances of a successful transition. Working with parents with migrant or indigenous backgrounds to support their child's language learning can create trust and can foster a closer relationship with parents and communities.

Slovenia supports the education of Roma children guided by a strategy adopted in 2004 and amended in 2011. Special projects for the Roma community are put in place to establish trust and facilitate smoother transitions between kindergartens, schools and Roma families. The projects assign Roma assistants and offer diverse activities in the settings (e.g. visits of Roma children to kindergarten). In the Netherlands, ECEC institutions are encouraged to collaborate with parents, especially in the "vve" targeted programmes for disadvantaged children. The programmes provide in-service training, including how they can collaborate with and provide support to parents.

Provide supplementary support for disadvantaged children

Process quality (e.g. staff-child interactions and pedagogical practices) is often shaped by structural quality (e.g. staff-child ratios and group size). Staff-child ratios and class size may vary between ECEC and primary school classrooms, with often less favourable conditions in primary schools (See Table 1.5, Chapter 1) (Ebbeck et al., 2013). In ECEC settings, children are typically engaged in activities which staff require collaboration, while in schools, teachers are often given the sole responsibility for children' learning, which leaves less time for teachers to respond to children on an individual level (Karila and Rantavuori, 2014; Pianta, 2004). While some children may do well in large classrooms (Li et al., 2012), children from low-income, disadvantaged or second-language backgrounds may do better in smaller classes and with more individual attention (Bennett, 2007). Transitions should address the specific challenges for disadvantaged children arising from different regulations in ECEC and primary schools, and provide supplementary support where needed.

Support transition research and monitoring to improve policy

There is a general consensus on the scarcity of research on transitions and, in particular, on specific factors that are linked to improved child development. It is important to close the current knowledge gap in order to support policy makers to make better-informed decisions.

Most of the available findings on transitions are based on studies in English-speaking and Nordic countries. In the United States, research on transitions is vast, based on data drawn from large-scale longitudinal studies such as the Early Childhood Longitudinal Study-Kindergarten sample (ECLS-K) (Little et al., 2016; Schulting et al., 2005), on data from small-scale studies looking at specific issues related to transitions (Welchons and McIntyre, 2017; Wildenger and McIntyre, 2012) or on experimental studies and evaluation of programmes. In Australia, Ireland, New Zealand and the United Kingdom, there are also a number of studies looking at transitions to primary school. Finland has proactively reviewed international literature to promote research-based practices in transitions to school, which helped to create political and social interest in and understanding about the complexity of

transitions. In Denmark, transition is gaining a greater political focus. The government is funding a research project on transition with a focus on children from low socio-economic backgrounds. There is also evidence from other countries, generally gathered through smaller qualitative studies, but nonetheless insightful and informative (e.g. Germany, Italy, the Netherlands). However, more international research is needed.

Encouraging more monitoring of transitions can also help to identify whether ECEC settings and schools are delivering good practices, to level quality across regions and to provide feedback for further development. Jurisdictions, however, report that transitions are not commonly monitored (See Table 1.5, Chapter 1). To ensure quality transitions for all children, transitions should be monitored as part of the overall ECEC monitoring e.g. curriculum implementation and child development. Relevant examples of monitoring transitions include Norway's national surveys to monitor transitions; Sweden's longitudinal study during the transition period; Finland's study on children's perception on transitions; the evaluation of the *Brückenzahl* transition project in Germany.

The following research gaps and questions are highlighted in the chapters that make up this report. They are often part of the political debates on ECEC in general or related to transitions.

Answer key questions on institutional arrangements

- **Should the final year of ECEC be compulsory?** This will be a costly policy decision. Thus, questions include whether this will benefit all children or disadvantaged children, in particular by improving their participation rates; whether it will facilitate coherence between ECEC and primary schooling, etc. This topic often raises concerns over “schoolification”.
- **Should the number of ECEC hours be increased?** This is also a costly policy intervention, but many countries have recently increased the number of free hours as ECEC entitlements or shifted from half-day to full-day kindergartens, primarily to increase the participation of children in ECEC, especially those from disadvantaged backgrounds. Another objective is to better align the structure of ECEC with that of primary school as children may often spend longer hours in primary schools than in ECEC. While a consolidated body of research has shown the benefits of increased participation in ECEC, research findings on the optimal length of ECEC per day are inconclusive. Furthermore, the benefits of having similar programme structure in ECEC and primary school on transitions have not been studied (Yan and Lin, 2005; Sammons, 2010).
- **Should ECEC involve a half or full day?** Related to the above policy concern is the question over the benefits for children of having a full-day of ECEC. Some research has shown full-day kindergarten may facilitate better transitions, allowing a more relaxed pace and adequate time for preparing for transition (Winters, Saylor and Phillips, 2003). More flexible daily schedules allow children to be more involved in planning activities and more engaged into more process-oriented activities (Yan and Lin, 2005). However, there is very little research to link the benefits of having a full-day kindergarten with smoother transitions into school, such as whether it enhances pedagogical continuum between ECEC and primary school, leading to better child development.

Identify the specific areas for alignment in transitions

The specific factors that should be aligned between ECEC and primary schools remain more than explicit in the literature. The following questions have been identified as particularly in need of research:

- What are the effects of curricula and pedagogical continuity on a smooth transition from ECEC to primary education?

- What are the effects of documenting and mapping children's learning and development in ECEC, what kind of documentation about the child should be transferred from ECEC to school, and how should child development information be used in school? Which risks are connected to the absence of information on children's preschool acquisitions for primary school teachers?
- How can pre-service and in-service training contribute to successful transitions; e.g. what are the effects of having the same contents specific to "transition issues" in both pre-service and in-service training for ECEC staff and primary school teachers; what are the effects when ECEC staff and primary school teachers take the same course or workshop on "transition issues" in their pre-service or in-service training?

Identify the ingredients for effective parental and community engagement

Although some research suggests how children and parents experience the transition, there is still a need for further research into the factors that influence participation by children and families in transition programmes, from the perspectives of these key actors. Questions include:

- What forms of collaboration can promote positive outcomes for children, parents and staff?
- What transition activities can help families support children's transition to primary school?
- What forms of collaboration with community services can enhance a smooth transition to school?

Understand more about equity in transition

There is shortage of literature on the effects of transition programmes in different contexts (such as children from migrant backgrounds, with linguistically diverse needs, with special educational needs, and from lower socio-economic or lone-parent households). Research is needed to explore the effects of transition practices on at-risk or disadvantaged children and parents.

Notes

1. See www.startgroepen.nl.
2. See <http://gov.wales/topics/educationandskills/foundation-phase/action-plan/?lang=en>.
3. The Ministry of Children and Family Affairs until 2006.
4. Programmes that are developed in collaboration with stakeholders and where children and their families have a number of opportunities to get familiar with school in formal and informal settings.

References

- Ackesjö, H., (2013), "Children crossing borders: School visits as initial incorporation rites in transition to preschool class", *International Journal of Early Childhood*, Vol. 45, pp 387-410.
- Bennett, J. (2007), "A strong and equal partnership", in M. Woodhead and J. Oates, (Eds), *Early Childhood and Primary Education*, Vol. 2 of *Early Childhood in Focus*, Milton Keynes, the Open University.
- Branch, G., Hanushek, E., and Rivkin, S. (2009), Estimating Principal Effectiveness. Working Paper 32. National Center for Analysis of Longitudinal Data in Education Research.
- Bronfenbrenner, U. (1994), " Ecological Models of Human Development" in *International Encyclopedia of Education*, Vol. 3/2, pp. 37-43, Elsevier, Oxford.
- Bronfenbrenner, U. (1986), " Ecology of the Family as a Context for Human Development: Research Perspectives", *Developmental Psychology*, Vol. 22/6, pp. 723-742.
- Burchinal M.R., et al. 2002), "Development of academic skills from preschool through second grade: Family and classroom predictors of developmental trajectories", *Journal of School Psychology*, Vol. 40, pp. 415-436.
- Corsaro, W. and Molinari, L. (2008), Policy and Practice in Italian Children's Transition from Preschool to Elementary School, *Research in Comparative and International Education*, Vol. 3/3, pp. 250-265.
- CPB (Netherlands Bureau for Economic Policy Analysis) (2016), Impact of funding targeted pre-school interventions on school readiness: Evidence from the Netherlands, CPB Discussion Paper 328, The Netherlands, www.cpb.nl/sites/default/files/publicaties/download/cpb-discussion-paper-328-impact-funding-targeted-pre-school-interventions-school-readiness.pdf.
- Desimone, L., et al. (2004), "Comprehensive School Reform: An Implementation Study Of Preschool Programs In Elementary Schools", *The Elementary School Journal*, Vol. 104/5, pp. 387-407.
- Ebbeck, M., et al. (2013), "Children's Voices: Providing Continuity in Transition Experiences in Singapore", *Early Childhood Education Journal*, Vol. 1, pp. 291-298.
- Fabian, H. and A-W. Dunlop (2006), *Outcomes of good practice in transition processes for children entering primary school*, Background paper prepared for the Education for All Global Monitoring Report 2007, Strong foundations: early childhood care and education, UNESCO, Paris.
- Fives, H. (2003), "What is Teacher Efficacy and How does it Relate to Teachers' Knowledge? A Theoretical Review", Paper presented at the American Educational Research Association Annual Conference, Chicago.
- Hirst, M., et al. (2011), *Transition to primary school: a review of the literature*, Commonwealth of Australia, Canberra.
- Huntsman, L. (2008), Determinants of quality in child care: A review of the research evidence, Centre for Parenting and Research, NSW Department of Community Services.
- Isaacs, J. (2008), Impacts of Early Childhood Programs, First Focus, Brookings Institution, Washington D.C., www.brookings.edu/research/papers/2008/09/early-programs-isaacs.
- Karila, K. and L. Rantavuori (2014), "Discourses at the boundary spaces: developing a fluent transition from pre-school to school", *Early Years*, Vol. 34/4, pp. 377-391.
- Laloux, C., 2012, *Des organisations pédagogiques pour faire réussir les élèves à l'école maternelle*. Direction des services départementaux de l'éducation national du Pas-de-Calais [Pedagogical organisations to make students succeed in kindergarten. Directorate for National Education Department of Pas-de-Calais], Lille, France.

- Li, H., R. Nirmala and S.K. Tse. (2012), "Adapting Western Pedagogies for Chinese Literacy instruction: Case Studies of Hong Kong, Shenzhen, and Singapore Pre-schools. Early Education and Development", Vol. 23/4, pp. 603-621.
- Lillejord, S., et al. (2017), *Transition from kindergarten to school - A systematic review*, Knowledge Center for Education, Oslo.
- Litjens, I. and M. Taguma (2010), "Literature overview for the 7th meeting of the OECD Network on Early Childhood Education and Care", OECD, Paris.
- Lipponen, L., K. Kumpulainen and J. Hilppö (2013), "Varhaiskasvatuksen pedagogiikka" [Early Childhood Pedagogy], Tampere: Vastapaino, pp. 159-175.
- Little, M.H., L. Cohen-Vogel, F.C. Curran, (2016)," Facilitating the Transition to Kindergarten: What ECLS-K Data Tell Us about School Practices Then and Now", *AERA Open*, Vol.2/3, pp.1-18.
- Magnuson, K.A., Ruhm, C., and Waldfogel, J. (2007), "The persistence of preschool effects: Do subsequent classroom experiences matter?", *Early Childhood Research Quarterly*, Vol. 22/1, pp. 18-38.
- Margetts, K., 2007. Understanding and supporting children: shaping transition practices, in: Dunlop, A.-W., Fabian, H. (Eds.), *Informing Transitions in the Early Years: Research, Policy and Practice*. Open University Press and McGraw Hill, Maidenhead, pp. 107-119.
- Melhuish, E., et al. (2015), *A review of research on the effects of early childhood Education and care (ECEC) on child development*, <http://ecec-care.org/resources/publications/>.
- Moon, J. and J. Burbank (2004), "The early childhood education and wage ladder; a model for improving quality in early learning and care programs", Policy Brief, Economic opportunity Institute, Seattle WA.
- Murnane, R. J., and R. J. Olsen, (1990), "The effects of salaries and opportunity costs on length of stay in teaching: Evidence from North Carolina", *Journal of Human Resources*, Vol. 25/1, pp. 106-124.
- OECD (2016a), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.
- OECD (2016b), *School Leadership for Learning: Insights from TALIS 2013*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264258341-en>.
- OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD (2006), *Starting Strong II: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264035461-en>.
- Peters, S. (2010), *Literature Review: Transition from Early Childhood Education to School*, University of Waikato, Hamilton, New Zealand.
- Pianta, R.C. (2004), "Transitioning to school: Policy, practice, and reality. The Evaluation Exchange", Vol. 10/2, Cambridge, MA, The Harvard Family Research Project, Harvard Graduate College of Education.
- Rimm-Kaufman, S. E. and R.C. Pianta. (2000)", "An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research", *Journal of Applied Developmental Psychology*, Vol. 21, pp. 491-511.
- Sammons, P. (2010), "The EPPE Research Design: an educational effectiveness focus" in: Sylva et al. (eds.), *Early Childhood Matters: Evidence from the Effective Pre-school and Primary Education project*, Routledge, London/New York.

- Schulting, A.B., Malone, P.S., Dodge, K.A., 2005, The effect of school-based kindergarten transition policies and practices on child academic outcomes, *Developmental Psychology*, Vol. 41, pp. 860-871.
- Shonkoff, J. P. and D. A. Phillips (2000), *From Neurons to Neighborhoods: The Science of Early Childhood Development*, National Academy Press, Washington DC.
- Stipek, D., et al. (2017), "Pk-3: What does it mean for instruction?", *Social Policy Report*, Vol. 30/2.
- Vogler, P., Crivello, G., Woodhead, M. (2008), "Early childhood transitions research: A review of concepts, theory, and practice", Working Paper No. 48, Bernard van Leer Foundation, The Hague.
- Welchons, L.W. and L.L. McIntyre (2017), "The Transition to Kindergarten: Predicting Socio-Behavioral Outcomes for Children With and Without Disabilities", *Early Childhood Education Journal* (2017), Vol. 45, pp. 83-93, <http://dx.doi.org/10.1007/s10643-015-0757-7>.
- Welsh Government (2014), "Flying Start annex: Transition guidance", Welsh Government, Cardiff, <http://gov.wales/docs/dsjlg/publications/cyp/141124-transition-guidance-en.pdf>.
- Wildenger, L.K., and L.L. McIntyre (2012), "Investigating the relation between kindergarten preparation and child socio-behavioral outcomes", *Early Childhood Education Journal*, Vol. 40/3, pp. 169-176.
- Winters, D.L., C.H. Saylor, and C.Y. Phillips. (2003), Full-day kindergarten: A story of successful adoption and initial implementation, *Young Children*, Vol. 58/6, pp. 54-58.
- Yan, W. and Q. Lin. (2005), "Effects of class size and length of day on kindergartners' academic achievement: Findings from early childhood longitudinal study", *Early Education and Development*, Vol. 16/1, pp. 49-68.

ANNEX A

Methodology

The OECD Secretariat collected information on country approaches to transitions through the preparation of Country Background Reports (CBRs). These were prepared by the nine countries that made voluntary contributions to cover the costs of this project: eight OECD countries (Austria, Denmark, Finland, Japan, Norway, Slovenia, Sweden and Wales, United Kingdom) and one partner country (Kazakhstan). The CBRs were prepared following guidelines provided by the OECD Secretariat. They responded to a common set of issues and questions, and followed a common framework to facilitate comparative analysis and to maximise the opportunities for countries to learn from each other. They have been written in an accessible style so as to reach a wider audience. They provide detailed information on the countries' transition system and practices, including the policies and practices that are implemented in public ECEC settings and primary schools, and an in-depth analysis of context, key factors and policy responses. They are an invaluable source of information for the final synthesis report. The CBRs are been published in the OECD ECEC website at: www.oecd.org/edu/starting-strong-v-9789264276253-en.htm.

In addition, data on transitions were collected through a questionnaire in Excel format sent to all OECD ECEC Network members. The Network is a unique knowledge-sharing platform for national, regional or local policy-makers working on developing ECEC policies. It includes OECD member and non-member economies (such as Colombia and Kazakhstan) and other international organisations such as the European Commission, the World Bank, and UNESCO. For further information, consult: www.oecd.org/edu/ecec-network.htm.

Completion of the transition questionnaire was voluntary, but all network members were strongly encouraged to complete it in order to create a rich source of comparative data on transitions. The questionnaire can be accessed on the website www.oecd.org/edu/starting-strong-v-9789264276253-en.htm. A total of 27 OECD countries and three partner countries (Colombia, Croatia and Kazakhstan) completed the questionnaire (Table A.1). Some countries (Austria, Germany, Canada and Switzerland) provided information disaggregated by jurisdictions (Länder, provinces and territories or regions for some indicators). Hence for some indicators information covers data of up to 63 jurisdictions.

Table A.1. List of countries and jurisdictions completing transitions questionnaire

Austria (9 Länder)	Ireland	Slovak Republic
Belgium (Flanders)	Italy	Slovenia
Canada (10 provinces and 3 territories)	Japan	Spain
Chile	Luxembourg	Sweden
Czech Republic	Mexico	Switzerland (3 regions)
Denmark	Netherlands	Turkey
Finland	New Zealand	UK (Wales)
Germany (16 Länder)	Norway	Colombia
Greece	Poland	Croatia
Hungary	Portugal	Kazakhstan

Note: Countries in bold also completed a country background report.

The findings from the questionnaire have been supplemented by data from the OECD publication *Education at a Glance 2016*, to provide a comprehensive picture of both the pre-school and the primary school sector. The data drawn from this OECD publication included data of all OECD countries irrespective of whether they completed the questionnaire on transitions or not. These countries include: Australia, Estonia, France, Iceland, Korea, New Zealand and the United States.

The report drew significantly from a literature review conducted by the Knowledge Centre of Education in Norway (Lillejord et al., 2017). This review was prepared by Norway as an in-kind contribution to the OECD project on transitions. The evidence in this report was, however, complemented with a literature review conducted by the OECD Secretariat.

ANNEX B

List of network member contributors to Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education

Contributors to this publication provided country data, country-specific policy information, comments on the drafts, etc. as members of the OECD Network on Early Childhood Education and Care (listed in alphabetical order).

Country	Name	Organisation
Australia	Australian Government Department of Education and Training	
Austria	Ms Sandra Wimmer	Charlotte Bühler Institut
	Ms Birgit Hartel	Charlotte Bühler Institut
	Ms Manuela Ottowitz	Charlotte Bühler Institut
	Ms Gabriele Bäck,	Charlotte Bühler Institut
	Ms Marisa Krenn-Wache	College for the training of nursery school teachers, Carinthia
	Mr Andreas Grimm	Federal Ministry for Education
	Mr Stefan Polzer	Federal Ministry for Education
Belgium (Flanders)	Ms Annick Denys	Policy Area Education and Training
	Mr Guy Stoffelen	Policy Area Education and Training
	Ms Isabelle Erauw	Policy Area Education and Training
	Ms Liesbeth Hens	Policy Area Education and Training
	Ms Elke Naessens	Policy Area Education and Training
	Ms Christele Van Nieuwenhuyzen	Kind en Gezin (Child and Family), Policy Area Childcare
Canada	Mr Kelly Hennig	Alberta Education
	Mr Jacques Robert	Ministère de la Famille du Québec (Ministry of Families, Quebec)
	Mr Christian Paradis	Employment and Social Development Canada
	Dr Robin Liu Hopson	Council of Ministers of Education Canada

Country	Name	Organisation
Chile	Ms María Isabel Díaz	Ministry of Education
	Mr Victoria Parra	Ministry of Education
	Mr Ignacio Fernández	Ministry of Education
	Mr Rodrigo Castillo	Ministry of Education
	Mr Felipe Godoy	Ministry of Education
	Ms Francisca Rodríguez	Ministry of Education
	Ms Katherine Becker	Ministry of Education
Colombia	Ms Ana María Rodriguez Rodriguez	Ministry of Education
	Mr Jonathan Perry	Ministry of Education
	Ms Luz Angela Caro Yazo	Ministry of Education
	Ms Angy Mateus Segura	Ministry of Education
	Mr Carlos Andres Aragon Álvarez	Ministry of Education
	Ms Azucena Vallejo Concha	Ministry of Education
Croatia	Prof Tijana Vidovic	Ministry of Science and Education
	Prof Ingrid Jurela Jarak	Ministry of Science and Education
Czech Republic	Dr Irena Borkovcová	Czech School Inspectorate
	Ms Hana Novotná	Czech School Inspectorate
Denmark	Undervisningsministeriet (Danish Ministry of Education)	
	Børne- og Socialministeriet (Danish Ministry for Children and Social Affairs)	
	Danmarks Lærerforening (Danish Union of Teachers)	
	Skole og Forældre (School and Parents)	
	Kommunernes Landsforening (Local Government Denmark)	
	Børne- og Kulturchefforeningen (The Association for Public Administrators for Children and Culture)	
Finland	Børne- og Ungdomspædagogernes Landsforbund (BUPL) og BUPL's Lederforening (Danish Union of Early Childhood and Youth Educators (BUPL) and BUPL Leadership Section)	
	Ms Kirsi Alila	Ministry of Education and Culture, Councillor of Education
	Ms Tarja Kahiluoto	Ministry of Education and Culture, special government adviser
	Ms Petra Packalen	National Agency for Education, Councillor of education
	Ms Heli Nederström	Ministry of Education and Culture, Councillor of Education
	Ms Najat Ouakrim-Soivio	Ministry of Education and Culture, Councillor of Education
	Ms Tuija Turunen	University of Lapland
	Ms Saara Salmi	University of Helsinki
France	Ms Kristiina Kumpulainen	University of Helsinki
	Mr Gilles Petreault	Ministère de l'éducation nationale (Ministry of Education)
Germany	Ms Dana Harring	Deutsches Jugendinstitut e.V. (German Youth Institute)
	Ms Carolyn Seybel	Deutsches Jugendinstitut e.V. (German Youth Institute)
	Ms Janina Eberhart	Deutsches Jugendinstitut e.V. (formerly) (German Youth Institute)
	Mr Wilfried Griebel	Staatsinstitut für Frühpädagogik (IFP) (State Institute of Early Childhood Research)

Country	Name	Organisation
Greece	Ms Magdalini Trantallidi	Hellenic Ministry of Education, Research and Religious Affairs
	Ms Anastasia Protopsalti	Hellenic Ministry of Education, Research and Religious Affairs
	Ms Dimitra Xynou	Permanent Delegation of Greece to the OECD
	Ms Zoe Karathanasi	Permanent Delegation of Greece to the OECD
Hungary	Mr László Limbacher	Ministry of Human Capacities
	Ms Tünde Hagymásy	Ministry of Human Capacities
	Mrs Andrea Paszkoszné Kulcsár	Ministry of Human Capacities
	Mrs Ildikó Kovácsné Bárány	Ministry of Human Capacities
Ireland	Mr Michael Keenan	Department of Children and Youth Affairs
	Ms Bevin Doyle	Department of Children and Youth Affairs
	Ms Roisin O'Loughlin	Department of Children and Youth Affairs
	Ms Aoife Conduit	Department of Education and Skills
	Ms Antoinette Gibbs	Department of Education and Skills
Japan	Dr Kiyomi Akita	University of Tokyo
	Dr Ryo Kadota-Korogi	Seinan Gakuin University
	Mr Yohei Ito	Permanent Delegation of Japan to OECD
	Mr Takashi Kiryu	Permanent Delegation of Japan to OECD
	Mr Takashi Murao	Permanent Delegation of Japan to OECD
	Ms Hisayo Nomura	Permanent Delegation of Japan to OECD
	Children and Child-Rearing Administration, Cabinet Office Early Childhood Education Division, Elementary and Secondary Education Bureau, Ministry of Education, Culture, Sports, Science and Technology Day Care Division, Equal Employment, Child and Family Policy Bureau, Ministry of Health, Labour and Welfare	
Kazakhstan	Mr Yerlan Shulanov	JSC "Information-Analytic Center"
	Mr Yeldos Nurlanov	JSC "Information-Analytic Center"
	Ms Yelizaveta Korotkikh	JSC "Information-Analytic Center"
	Ms Lada Baron	JSC "Information-Analytic Center"
Korea	Dr Yoon Kyung Choi	Korea Institute of Child Care and Education
Luxembourg	Mr Manuel Achten	Ministry of Education, Children and Youth
	Dr Anne Reinstadler	Ministry of Education, Children and Youth
	Mrs. Claude Sevenig	Ministry of Education, Children and Youth
Mexico	Ms Elisa Bonilla Rius	Ministry of Public Education
	Ms María Teresa Sandoval Sevilla	Ministry of Public Education
	Ms María del Carmen Campillo Pedrón	Ministry of Public Education
	Mr Carlos Tena Razo	Permanent Delegation of Mexico to the OECD
Netherlands	Ms Inge Bruggers	Ministry of Social Affairs and Employment
	Ms Titia Zwarts	Ministry of Education Culture and Science
New Zealand	Ms Siobhan Murray	Ministry of Education
	Ms Hannah Stanfield	Ministry of Education
	Ms Chris Harwood	Ministry of Education
	Ms Nancy Bell	Ministry of Education
	Mr David Scott	Ministry of Education

Country	Name	Organisation
Norway	Ms Maria Bakke Orvik	Norwegian Directorate for Education and Training
	Ms Victoria Elise Olsen	Norwegian Directorate for Education and Training
	Ms Tove Mogstad Slinde	Ministry of Education and Research
	Ms Kristina Kvåle	Ministry of Education and Research
	Ms Annette Qvam	Norwegian Directorate for Education and Training
	Ms Marit Solvoll	Norwegian Directorate for Education and Training
Poland	Mr Aleksander Tynelski	Ministry of National Education
	Ms Katarzyna Malec	Ministry of National Education
Portugal	Mr Pedro Cunha	Ministry of Education
	Mr Helder Pais	Ministry of Education
	Ms Liliana Marques	Ministry of Education
	Ms Conceição Baptista	Ministry of Education
	Ms Helena Gil	Ministry of Education
	Ms Ana Xavier	Ministry of Education
	Ms Olívia Soutinho	Ministry of Education
	Ms Leonor Venâncio Duarte	Ministry of Education
Slovak Republic	Ms Viera Hajdúková	Ministry of Education, Science, Research and Sport of the Slovak Republic
	Slovak Centre of Scientific and Technical Information	
Slovenia	Ms Barbara Kresal Sterniša	Education development Office, Ministry of Education, Science and Sport
	Ms Nada Požar Matijaši	Education development Office, Ministry of Education, Science and Sport
	Dr Maša Vidmar	Educational Research Institute
	Dr Tina Rutar Leban	Educational Research Institute
	Dr Sonja Rutar	Educational Research Institute
	With the cooperation of the Pre-School and Basic Education Directorate at the Ministry of Education, Science and Sport	
Sweden	Ms Åsa Källén	Ministry of Education and Research
Switzerland	Mr Alexander Gerlings	Swiss Conference of Cantonal Ministers of Education (EDK)
Turkey	Ministry of National Education	
United Kingdom (Wales)	Mr Graham Davies	Foundation Phase, Welsh Government
	Ms Rhiannon Davies	Foundation Phase, Welsh Government
	Ms Alyson Francis	Children and Families Division, Welsh Government
	Ms Claire Rowlands	Curriculum, Assessment and Pedagogy Division
	PACEY Cymru	

Glossary of terms¹

Accountability (in ECEC settings): ECEC leaders and staff being held responsible for monitoring and measuring the quality and effectiveness of their service provision, teaching/care and children's development, well-being and learning (adapted from Kilderry, 2012).

Accreditation (in ECEC settings): A process by which ECEC service providers, training providers, or staff undergo an evaluation, by an external institution (such as an accreditation body), of their service, programme provision, or teaching/caring practices to confirm whether they meet a certain set of regulations or standards.

Active learning: Refers to when children participate in their learning process. It is related to self-initiated, intrinsic-motivated learning as opposed to passive learning.

Advisors (or Counsellors) in ECEC and primary school settings: Professionals who work across classes and/or playgroups, providing additional guidance and support to teachers, other staff or children, generally or specific to transitions. This category only appears in a few countries.

Autonomy of a child: The ability of a child to undertake activities, tasks etc. without the help of others (mastery of skills), to make their own decisions, to express their own opinions or ideas, and to feel secure and have confidence in their own ability.

Assessment of children: Judgement on individual progress and achievement of goals. It covers classroom/playroom-based assessments as well as large-scale, external assessments and examinations, and refers to the process of documenting knowledge, skills, attitudes and beliefs. Assessment can focus on the individual learner and staff (adapted from OECD, 2013). Assessment can be direct or indirect and its use formative or summative.

- **Direct assessment:** Assessments that look at concrete outputs of learning, i.e. the measurable and demonstrated knowledge and skills of children/staff.
- **Indirect assessment:** Assessments that examine indicators of learning and gather information through feedback, e.g. in surveys or interviews (adapted from Middle States Commission on Higher Education, 2007).
- **Formative assessment:** Assessments that frequently or continuously (not at one point in time only) and interactively assess child development and progress with the purpose of understanding and identifying learning needs and adjusting instruction and teaching methods accordingly (adapted from OECD, 2005; Litjens, 2013).
- **Summative assessment:** Assessments that measure learning results at the end of a certain time period to obtain summary statements. These can be used e.g. for holding staff and settings accountable for providing quality ECEC or as a method to identify whether children have learning disadvantages (adapted from OECD, 2005; Litjens, 2013).

Assistants: Assistants support the “teacher” with a group of children or class. Assistants are more common in pre-primary education than in primary education. They usually have to meet lower qualification requirements than teachers, which may range from no formal requirements to, for instance, vocational education and training.

Attention: A skill allowing for the concentration of the mental powers upon an object, subject or person; a careful observing or listening.

Career: A paid job that is likely to form a person’s life’s work.

Classroom/playgroup/group: A group of children who take part in supervised creative and social play or education within the ECEC setting or primary school (see also ECEC and ECEC setting).

Centre-based/school-based provision or settings: Publicly regulated ECEC settings provided outside the home. The services provided can be full time or part time and can include nurseries, daycare centres, crèches, preschools, pre-kindergartens, and kindergartens (adapted from Eurydice/European Commission/EACEA/Eurostat, 2014; OECD, 2012).

Checklist: A list of items, tasks or steps to be taken in a specific order to be checked or consulted. In ECEC, this can be used to assess or evaluate the developmental status of children, staff performance, and the quality of ECEC services by observing compliance with regulations. This may also include a series of tasks, skills and abilities to assess children’s development or knowledge, such as “Child can count to five” or “Child is able to play independently” (OECD, 2012).

Child-to-teacher ratio: The ratio of children to teacher, obtained by dividing the number of full-time equivalent children at a given level of education by the number of full-time equivalent “teachers” (see definition of **teachers**) at that level and in similar types of institutions (see also **staff-child ratio**). The child-to-teacher ratio is one of the key variables policy makers use to control spending on education. The child-to-teacher ratio is an important indicator of the resources invested in ECEC, and also of the quality of these services. Because of the difficulty of constructing direct measures of educational quality, this indicator is also often used as a proxy for quality, on the assumption that a smaller ratio of children to teacher means better access by children to teaching resources. However, a low ratio of children to teacher does not necessarily mean better access to teaching and to educational support for the individual child unless the actual pedagogical practices are developed in such a way that this is ensured. But a very high ratio of children to teacher certainly suggests insufficient professional support for learning, particularly for children from disadvantaged home backgrounds.

Cognitive skills: Cognitive skills comprise verbal and nonverbal information processing skills, which enable the acquisition of knowledge, as well as the development of a wider set of skills (e.g. **socio-emotional, practical, cognitive, and motor skills**), attitudes and values. See also **pre-academic skills**.

Creative skills (e.g. art, music, dance, imagination): Children’s capacities and competencies to generate ideas and feelings, use imagination and convey thoughts and experiences in many forms of expressions, including artistic skills (e.g. painting, drawing, handicrafts), and musical skills (e.g. singing, playing an instrument, recognising songs). It also refers to the capacity to observe and reflect, explore on their own, and search for their own answers and solutions.

Collaborative activities: Activities that involve ECEC and/or primary-school staff working together for job-related purposes.

Community organisations/institutions: Local institutions that are located in the same community as the ECEC setting or primary school. They may be run by the central government (e.g. a healthcare centre), the local government, or be community-based (e.g. a non-profit environmental group).

Counsellors: See **Advisors**.

Curriculum: The contents of early childhood education such as learning areas and learning goals. In a narrow sense, it describes the “what” of teaching. In a broader sense, it is often defined as “the sum of all experiences in childhood settings”. Even though often simultaneously used, it is not the same as **pedagogy**.

Curriculum framework: A core policy document that includes statements about underlying values; conceptions of learning; and the major aims, purposes and tasks of education. It describes a range of requirements, regulations and advice which should be respected by all stakeholders in the education system, and which should guide the work of schools, teachers and the developers of other curriculum documents (such as textbooks and teacher guides) (UNESCO IBE, 2016).

Curriculum implementation: The actual use in practice (practical application) of the curriculum or curriculum framework by ECEC staff, managers and children. This refers to the way in which the concepts of the curriculum are put into effect, how they are used in practices and activities by staff and children, how they are interpreted, how they are used in development and learning, and how they influence teaching, caring and interactions between staff, and between staff and children.

Decentralised system: An organisation whose decision-making authority for ECEC does not reside with a central institution. Decision making on ECEC is done at a decentralised level, at the level of regions, provinces or municipalities. The central authority has little or no influence on decision making in ECEC.

Degree: An academic degree is a position and title within a college or university that is usually awarded in recognition of the recipient having either satisfactorily completed a prescribed course of study, or completed other work to show that degree requirements were met. The most common degrees awarded today are associate’s, bachelor’s, master’s, and doctoral degrees. Degrees for ECEC and primary schooling include (but are not limited to) diplomas or state examinations.

Developmental continuity: The principle of continuity of development means that new skills develop progressively, building on skills formed from previous learning experiences. According to Dewey, what the child “has learned in the way of knowledge and skill in one situation becomes an instrument of understanding and dealing effectively with the situations which follow” (Dewey, 1963, p. 44).

Diaries and journals: Tools used by ECEC staff or primary school teachers to document and reflect on their experiences working with children as part of their learning process.

ECEC: Early childhood education and care. It includes all arrangements providing care and education for children under compulsory school age, regardless of setting, funding, opening hours or programme content (see also **ECEC setting**) (OECD, 2001).

ECEC centre: See **ECEC setting**.

ECEC centre leader: A centre leader is defined as the person with the most responsibility for the administrative, managerial and/or pedagogical leadership at the ECEC centre. As part of the leadership role, centre leaders may be responsible for the monitoring of children, the supervision of other staff, contact with parents and guardians, and/or the planning, preparation and carrying out of the pedagogical work in the centre. Centre leaders may also spend part of their time working with the children. See also **Principal**.

ECEC profession: A vocation related to early childhood education and care, particularly working with children. The titles for this profession may vary from country to country, such as childcare worker, child minder, family and day care worker, teacher (e.g. pre-primary teacher; primary teacher; kindergarten teacher; preschool teacher), pedagogue, or other auxiliary staff. See also **ECEC staff**.

ECEC quality: A multidimensional concept covering structural characteristics and process quality. Conceptualisations cover global aspects (such as warm climate or child-appropriate behaviour) and domain-specific stimulation in learning areas such as literacy, emerging mathematics and science. Some researchers include orientation quality as an additional dimension of ECEC quality, referring to pedagogical values, beliefs and approaches of teachers and ECEC settings (see Anders, 2015) (see Structural quality, Process quality).

ECEC sector: The ECEC sector consists of multiple entities such as ECEC centres (e.g. daycare centres, kindergartens, preschools, pre-primary schools), family daycare, local educational authorities, and other institutions/services that support children's development. The sector also comprises all actors/agents on national, regional and local level that play a part in developing the practices and policies for providing ECEC (see also **ECEC setting**).

ECEC setting: A place where ECEC is delivered. Also referred to as ECEC centre or provision. Most settings typically fall into one of the following categories:

- 1) **Regular centre-based ECEC:** more formalised ECEC centres typically belong to one of these three sub-categories:
 - *Centre-based ECEC for children under the age of 3:* often called "crèches", these settings may have an educational function, but are typically attached to the social or welfare sector and associated with an emphasis on care.
 - *Centre-based ECEC for children from the age of 3:* often called kindergarten or preschool, these settings tend to be more formalised and linked to the education system. Many of them are part-time and provided in schools, but they can also be provided in designated ECEC centres.
 - *Age-integrated centre-based ECEC for children from birth or one year old, up to the beginning of primary school:* can be called kindergarten, preschool, or pre-primary, and offer a holistic pedagogical provision of education and care (often full-day). To an increasing degree, these settings are linked to the educational system.
- 2) **Family daycare ECEC:** licensed home-based ECEC, which is most prevalent for children under the age of 3. These settings may or may not have an educational function and be part of the regular ECEC system. The minimum requirements defined for licensed family daycare services vary widely across countries. Requirements range from registration with an initial (one-off) health and safety check; to registration with annual safety and health checks (the most usual form of licensing imposed on providers); to – in the most advanced cases – registration with requirements for staff and curriculum standards, annual pedagogical inspection, in-training requirements, and pedagogical supervision regularly ensured by an accredited supervisory body. Registered family daycare refers to providers who are recruited, supported, and, in some cases, employed, by a public authority or publicly-funded private organisation.
- 3) **Licenced or formalised drop-in ECEC centres:** often receiving children across the entire ECEC age bracket and even beyond, these drop-in centres often complement home-based care or services of other centre-based settings, and allow parents to complement home-based care by family members or family daycare with more institutionalised services. They may also cater for children outside the opening hours of other centre-based ECEC settings, such as nursery schools. This type of ECEC setting allows children and children accompanied by caretakers (parent, guardian, relative or childminder) to attend a playgroup led by ECEC professionals on a drop-in basis (without having to apply for a place).

ECEC staff: People whose professional activity involves the 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 (see also **Teacher, Assistant, Staff for individual children and Advisors**).

ECEC systems, policies and programmes: National, regional or municipal systems, policies, and programmes for ECEC. Systems here refer to institutional, organisational entities adopted by the government. Policies refer to plans of action adopted by ECEC settings or rational courses of actions taken by governments. Programmes refer to projects or services designed for ECEC settings.

Education at a Glance (EAG): Education at a Glance is an OECD publication containing a rich, comparable and up-to-date array of indicators that reflect a consensus among professionals on how to measure the current state of education internationally. The EAG indicators released in this publication are based on the UNESCO-UIS/OECD/EUROSTAT (UOE) data collection on education statistics administered by the OECD in 2015. The objective of the joint UOE annual data collection on education statistics is to provide internationally comparable data (mostly at national level, with some insights at the subnational level) on key aspects of formal education systems. Countries participating in the UOE data collection co-operate to gather the information, to develop and apply common definitions and criteria for quality control and data verification.

Education or training: All the listed ISCED levels or stages of staff and leaders' learning and/or professional development represented by a structured or certified programme. This education does not need to be exclusively related to education or qualifications for working with children.

Effectiveness, effective, effectively: Effectiveness is defined as the capability of producing desired outcomes. When something or someone is "effective" it means it (or they) has produced the intended or expected results.

Employment status: The type of contract agreement that an employee has with their employer. This contract agreement sets out the conditions of employment, and whether the employment is temporary or permanent.

Enrolment rates by age: Enrolment rates are expressed as net enrolment rates, which are calculated by dividing the number of children of a particular age group enrolled in the level of education by the size of the population of that age group. Generally, enrolment rates are based on head counts and do not distinguish between full-time and part-time study. Enrolment rates can be broken down by gender.

Evaluation: Refers to judgments on the quality of ECEC or primary settings or systems, policies and programmes (adapted from OECD, 2013).

Exchange days: An offer allowing children from primary school to visit their peers in ECEC settings and vice versa.

Expenditure on educational institutions as a percentage of GDP: This indicator provides a measure of the relative proportion of a nation's wealth that is invested in educational institutions and of the respective role of public and private stakeholders. Expenditure on education is an investment that can help to foster economic growth, enhance productivity, contribute to personal and social development, and reduce social inequality. The proportion of total financial resources devoted to education is one of the key choices made in each country by governments, enterprises, and individual students and their families alike.

Expenditure per child: This indicator represents direct public and private expenditure on educational settings/institutions in relation to the number of full-time equivalent children enrolled in these settings/institutions. Expenditure per child on a particular level of education is calculated by dividing the total expenditure on educational settings/institutions at that level by the corresponding

full-time equivalent enrolment. Only those educational settings/institutions and programmes are taken into account for which both enrolment and expenditure data are available. Expenditure in national currency is first converted into equivalent US dollars by dividing the national currency figure by the purchasing power parity (PPP) conversion factor. The children enrolment numbers used are those that are collected with a coverage aligned to that of the finance data.

Feedback to staff: Feedback is defined broadly as including any communication staff and teachers receive about their teaching and other work with children, based on some form of interaction with their work (e.g. observations of staff and teachers' work, discussions about curriculum design). Feedback can be provided through informal discussions with staff or teachers or as part of a more formal and structured arrangement.

Formal education or training: See Education or Training.

Free access (to ECEC services): Use of the concerned ECEC service is free of charge for the demand side, i.e. there are no fees for children and their parents. The resulting costs for free access are typically covered by (government) subsidies.

Full-time/part-time employment status: Whether the ECEC staff, primary school teacher, teachers, ECEC centre leaders or primary school principals are employed on a full-time or part-time basis.

Goals for children's development, well-being and learning: These goals are normally key ECEC goals, including underlying concepts and values. They may also be referred to as a curriculum or framework. Despite country-level differences, broad curriculum aims include (OECD, 2006; UNESCO, 1996):

- learning to be (to be confident and happy with one's self)
- learning to do (experimentation, play and group interaction)
- learning to learn (specific pedagogical objectives)
- learning to live together (respectful of differences and democratic values).

The goals for children's development, well-being and learning can be organised into subject elements or content areas, and may include literacy, numeracy, science, arts, music, physical education, practical skills, playtime and activities outside the ECEC setting or primary school, such as field trips.

Government: The entirety of the executive at all levels of governance, at national, state-level, regional and local level.

Group size or class size: The maximum number of children per member of staff working directly with the children (thus, excluding auxiliary staff, managers and other staff in ECEC and primary school settings who do not work directly with children in the playgroup or classroom).

Gross domestic product (GDP): An aggregate measure of production equal to the sum of the gross values added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs). The sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, less the value of imports of goods and services, or the sum of primary incomes distributed by resident producer units (OECD, 2017).

Head teacher: see Principal.

Health development: The physical health status of a child, encompassing physical well-being only (adapted from WHO, 2006 definition). Mental, emotional and social development are excluded from this definition; these are included in the definition of socio-emotional skills.

Home-based provision: Publicly regulated ECEC provision that is delivered in the provider's home. Regulations usually require providers to meet minimum health, safety and nutrition standards. Home-based provision excludes live-in and live-out nannies and babysitters (as defined by Eurydice/European Commission/EACEA/Eurostat, 2014).

Home language: The language that a person speaks at home with their family. This may be the person's first language or may be different than the mainstream language of instruction applicable in the national context or, as applicable, in the context of the jurisdiction or region.

Hybrid pedagogy: Pedagogy that minimises differences between ECEC and primary school by discussing and making traditions and cultures of both systems transparent (Lillejord et al., 2017).

Induction activities: Activities designed to introduce new ECEC staff or teachers into the ECEC or teaching profession, and to support experienced staff or teachers who are new to a setting. Induction activities might be presented in formal structured programmes (for example, regular supervision by the ECEC centre leader or primary school head, reduced work load, formal mentoring by experienced colleagues), or they might be informally arranged as separate activities available to support new colleagues (for example, informal peer work with other new colleagues, a welcome handbook).

Information and communications technology (ICT): The teaching and learning of technological and digital skills. Creating and developing the capacity to use digital and technological environments for development, communication and knowledge creation. Digital environments refer to computers (including laptops, tablets, iPads, netbooks, smart boards) and computer games, the Internet, television and radio, among others. The main purpose of ICT in education is to use media as a learning tool to improve learning processes. Another important goal is to teach children the thoughtful use of media for learning, education, development and to improve life quality.

Inspection: The process of assessing (inspecting, investigating) the quality and/or performance of institutions, staff, services, and programmes by those (inspectors) who are not directly involved in the ECEC settings being monitored, and who are usually specially appointed to fulfil these responsibilities.

Integrated ECEC setting: An ECEC setting which, in the same physical location, provides both child care and early education in an integrated fashion.

Integrated system: When the responsibilities for ECEC services are under one (leading) authority (at the national and/or regional level), e.g. the education ministry, ministry of social welfare or another authority. Those responsibilities may stretch from curriculum development to standard-setting, monitoring or financing.

ISCED Level(s): The International Standard Classification of Education (ISCED) is the reference classification for organising education programmes and related qualifications by education levels and fields (OECD/European Union/UNESCO-UIS, 2015).

ISCED Level 0: In ISCED 2011, level 0 covers early childhood education for all ages, including very young children. As the educational properties of ISCED 0 programmes can be difficult to assess directly, several criteria are used to come up with a technical definition. For a programme to be reported as ISCED level 0 it must have: adequate intentional educational properties; be delivered by qualified staff members; take place in an institutionalised setting; meet a minimum intensity/duration; and be targeted at children from age 0 until entry into ISCED level 1 (OECD, 2016). Programmes classified at ISCED level 0 may be referred to in many ways nationally, for example: early childhood education and development, play school, reception, pre-primary, preschool, Kindergarten, Kita, Krippe or educación inicial. For programmes provided in crèches, day-care centres, private homes, nurseries, *Tagespflege* or *guarderías*, it is important to ensure that they meet the ISCED level 0 classification criteria specified in ISCED 2011. ISCED level 0 programmes are sub-classified

into two categories depending on age and the level of complexity of the educational content: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02):

- **ISCED 01 – Early childhood educational development:** Typically aimed at very young children, aged 0-2. The learning environment is visually stimulating and language rich, and fosters self-expression with an emphasis on language acquisition and the use of language for meaningful communication. There are opportunities for active play so that children can exercise their co-ordination and motor skills under supervision and in interaction with staff. This is a new category not covered by ISCED 1997.
- **ISCED 02 – Pre-primary education:** Aimed at children in the years immediately prior to starting compulsory schooling, typically aged 3-5. Through interaction with peers and educators, children improve their use of language and their social skills, start to develop logical and reasoning skills, and talk through their thought processes. They are also introduced to alphabetical and mathematical concepts, understanding and use of language, and are encouraged to explore their surrounding world and environment. Supervised gross motor activities (i.e. physical exercise through games and other activities) and play-based activities can be used as learning opportunities to promote social interactions with peers and to develop skills, autonomy and school readiness.

ISCED level 1 (or primary education): Primary education usually begins at age 5, 6 or 7, and has a typical duration of six years. Programmes at ISCED level 1 are normally designed to give pupils a sound basic education in reading, writing and mathematics, along with an elementary understanding of other subjects, such as history, geography, natural science, social sciences, art and music. The beginning of reading activities alone is not a sufficient criterion to classify an education programme at ISCED level 1. Programmes classified at ISCED level 1 may be referred to in many ways, for example: primary education, elementary education or basic education (stage 1 or lower grades if an education system has one programme that spans ISCED levels 1 and 2). For international comparability purposes, the term “primary education” is used to label ISCED level 1 (definition from OECD, 2016).

ISCED 2011 classification: The ISCED classification was initially developed by UNESCO in the mid-1970s, and was first revised in 1997. Due to subsequent changes in education and learning systems throughout the start of the 21st century, a further review of ISCED was undertaken between 2009 and 2011 involving extensive global consultation with countries, regional experts and international organisations. The revision took into account important shifts in the structure of higher education, such as the Bologna process in Europe, expansion of education programmes for very young children, and increasing interest in statistics on the outcomes of education, such as educational attainment. The revised ISCED 2011 classification was adopted by the UNESCO General Conference at its 36th session in November 2011 and implemented in international educational statistics in 2015 (OECD/European Union/UNESCO-UIS, 2015).

Language and literacy skills: Children’s productive and receptive language skills on all levels: syntax (ability to form sentences), morphology (ability to form words), semantics (understanding the meaning of words/sentences), phonology (awareness of speech sounds), pragmatics (how language is used in different contexts), and vocabulary. Also refers to children’s (precursor) literacy skills, that is to say, all the skills related to reading and writing, such as recognising and writing letters and words, understanding pictures, etc.

Learning and development standards: Standards regarding child outcomes or child development set at a national or regional level. The standards set clear expectations that children need to meet on different developmental subjects, e.g. numeracy, reading, motor skills.

Legal entitlement to ECEC: Two types of legal entitlement to ECEC are distinguished (as defined in Eurydice, 2013):

- **Universal legal entitlement:** Statutory duty for ECEC providers to secure (publicly subsidised) ECEC provision for all children living in a catchment area whose parents, regardless of their employment, socio-economic or family status, require an ECEC place.
- **Targeted legal entitlement:** Statutory duty for ECEC providers to secure (publicly subsidised) ECEC provision for children living in a catchment area who fall into certain categories. These categories can be based on various aspects, including the employment, socio-economic or family status of their parents.

Local level or local authorities: The local level is a decentralised level of governance. It is located at city/town level in the vast majority of countries. In some countries, the municipalities take the main responsibility for ECEC settings and primary schools.

Minimum quality standards: The minimum benchmark for structural aspects of ECEC settings to ensure a minimum level of quality. These are often aspects of ECEC that can be regulated relatively easily (e.g. staff-child ratio, space, group size and qualifications of ECEC staff).

Monitoring: The process of systematically tracking aspects of ECEC services, primary schools, staff, child development and curriculum implementation, with a view to data collection, accountability and/or enhancing effectiveness and/or quality.

Monitoring instrument (or tool): A means used for monitoring or material that is used to conduct the monitoring process. Examples of instruments or tools for monitoring include checklists, rating scales and surveys.

Motor skills: The ability to perform complex muscle and nerve acts that produce movements, the ability to co-ordinate the body. These refer to both fine and gross motor skills and awareness of one's own body. Fine motor skills include small movements such as drawing and writing, crawling or putting shoes on. Gross motor skills are large movements like walking and kicking, running and cycling.

National level/national authorities (also referred to as central level or central authorities): The authorities responsible for ECEC at the highest level of governance in a country. Depending on the governance structure of the country, these authorities may or may not exert the key power of decision over ECEC policies and implementation.

Neighbourhood: The surrounding geographical area in which the setting or school is located.

Numeracy: The ability to reason and to apply simple numerical concepts and understand numbers. Basic numeracy skills consist of knowing and recognising space, shapes, location and direction, the basic properties of sets, quantity, order and number concepts, time and change, being able to count, to comprehend fundamental mathematics like addition, subtraction, multiplication and division.

Observation: A method to collect information on a subject from an outsider's perspective. It can be used for a specific purpose (e.g. inspection, peer review) or can be open ended (e.g. to document a child's progress for parents).

Parent/guardian association: A formal organisation composed of parents/guardians and/or ECEC staff or teachers that is intended to facilitate parent and/or guardian participation in ECEC settings or primary schools. It may be referred as PTA (parent-teacher association) or PTO (parent-teacher organisation).

Pedagogical continuity: The pedagogical aspects that facilitate children's transitions from ECEC to primary school, including curricula and pedagogical approaches, learning standards and

development goals and structural aspects that affect children's daily ECEC and school experiences (OECD, 2012).

Pedagogical leadership: The part of an ECEC centre leader's or primary school head teacher's role that focuses on oversight of pedagogical practice in the setting. This includes actions that a leader takes, or delegates to others, to facilitate or enhance the planning, preparation and carrying out of the pedagogical work in the centre.

Pedagogue: In some countries, the term "pedagogue" describes a qualified pedagogical staff member in an ECEC setting or a school who may provide either special support to some children or is the leader at the classroom or playroom level. See also **Teacher**.

Pedagogy: A set of instructional techniques and strategies to support children's learning, development, and the acquisition of skills, competencies, values and attitudes (Anders, 2015). It involves the staff's pedagogical knowledge, but also the way the knowledge is applied and the practices are implemented in interaction with children, and in response to children's requests and interests (Jensen, 2009). Curricula should provide clear and explicit pedagogical guidelines for staff to ensure that critical learning or development areas are covered (OECD, 2012).

Portfolio: A collection of pieces of work that can tell a story of child/staff progress or achievement in given areas.

Portfolio/diaries/journals: Tools used by staff and teachers to compile academic work and assemble other forms of educational evidence. They are a collection of pieces of work that can tell a story of child/staff progress, or achievement in given areas.

Practical skills: Skills that involve active involvement of a child and that children need in daily life, such as lacing shoes, brushing teeth, etc.

Pre-academic skills: Early academic skills that are part of cognitive development and that are learned before attending school, such as language, literacy, vocabulary, numeracy, motor skills, and social and emotional skills. See also **Cognitive skills**.

Pre-primary education (or Preschool): Services for children to support early development in preparation for participation in school and society. Can accommodate children from age three to the start of primary education. Often referred to as **preschool** and corresponds exactly to **ISCED Level 02** (see **ISCED**). For international comparability purposes, the term "early childhood education" is used to label ISCED level 0 (for more details, see Indicator C2 in *Education at a Glance 2015*, OECD, 2015b).

Preschool: see **Pre-primary education**.

Pre-service or initial education or training: Any formal or informal education or training that occurs before ECEC staff or primary school teachers begin working with children.

Primary education (or school): see **ISCED 1**.

Principal (or Head teacher): The person, typically a qualified teacher, responsible for the day-to-day management of a kindergarten facility or primary school (see also **ECEC centre leader**).

Private expenditure: Expenditure funded by private sources, i.e., households and other private entities. "Households" mean students and their families. "Other private entities" include private business firms and non-profit organisations, including religious organisations, charitable organisations, and business and labour associations. Private expenditure comprises school fees; materials such as textbooks and teaching equipment; transport to school (if organised by the school); meals (if provided by the school); and boarding fees.

Private setting: A setting administered/owned directly or indirectly by a non-governmental organisation or private person/organisation (church, trade union, business or other concern). Private settings may be publicly subsidised or not:

- **Private non-publicly subsidised setting:** A private setting that receives no funding from the public authorities. It is independent in its finances and governance; it is not dependent upon national or local government for financing its operations and is funded by private sources, which can be tuition charges/enrolment fees, gifts, sponsoring, etc.
- **Private publicly subsidised setting:** A setting that operates completely privately but receives some or all its funding from public authorities.

Process quality: What children actually experience in their programme – what happens within a setting, such as interactions between educators and children. It also consists of the relationships with parents, available materials and the professional skills of staff.

Professional continuity: The preparedness of ECEC staff and primary school teachers to facilitate children's transition to primary education. It requires that staff and teachers receive adequate pre-service and in-service training and that they are supported by the structural and procedural environment in which they operate. Professional continuity can be seen as a facilitating factor or even precondition for ensuring continuity of pedagogical and developmental practices.

Professional development activities: Activities designed to develop an individual's skills, knowledge and expertise as a staff member, leader or head of an ECEC setting or primary school (or more generally, a professional). These activities are formal and can include courses and workshops, as well as formalised collaboration and participation in professional networks. Thus professional development activities do not refer to every-day experiences and practice even though they may also be developing staff professionally.

Professional relationships/collaboration: Relationships among ECEC staff and primary school staff and their colleagues, external stakeholders (such as parents) and the children in their care that are positive, productive and meaningful.

Public and private institutions or settings: This report distinguishes between government-dependent and independent-private settings according to the degree of dependence on government funding. ECEC settings can be classified into three categories: (1) **independent-private ECEC settings** controlled by a non-government organisation or with a governing board not selected by a government agency that receive less than 50% of their core funding from government agencies; (2) **government-dependent private ECEC settings** controlled by a non-government organisation or with a governing board not selected by a government agency that receive more than 50% of their core funding from government agencies; and (3) **public ECEC settings** controlled and managed by a public education authority or agency (adapted from OECD, 2016).

Public expenditure on education: Spending by public authorities at all levels. Expenditure that is not directly related to education (e.g. culture, sports, youth activities, etc.) is not included unless these services/activities are provided as ancillary services by educational institutions. Expenditure on education by other ministries or equivalent institutions, for example health and agriculture, is included. It includes subsidies provided to households and other private entities (often in the form of financial aid to students) which can be attributable to educational institutions (e.g. fees) or not (e.g. private living costs outside of institutions). Public expenditure on education includes expenditure by all levels of government, both education specific authorities as well as other government agencies. Thus, central government expenditure includes not only the expenditure of national education ministries, but also all expenditure on education by other central government ministries and authorities. Similarly, educational expenditure by regional and local governments includes not only the expenditure of the regional or local agencies with primary responsibility for

operation of schools (e.g. provincial ministries of education or local education authorities), but also the expenditure of other regional and local bodies that contribute to the financing of education. Public expenditure is classified into the following three levels of government:

- Central (national) government
- Regional government (province, state, Land, etc.)
- Local government (municipality, district, commune, etc.).

Purchasing power parity (PPP): Purchasing power parities (PPPs) are the rates of currency conversion that equalise the purchasing power of different currencies by eliminating the differences in price levels between countries. In their simplest form, PPPs are simply price relatives which show the ratio of the prices in national currencies of the same good or service in different countries (OECD, 2017).

Rating scale: A set of categories designed to elicit information about a quantitative or a qualitative attribute. A common example is the 1-10 rating scale, in which a person (evaluator or assessor or survey respondent) selects the number that is considered to reflect the perceived quality or performance of the subject being monitored.

Regional level/regional authorities: A decentralised level of governance. It is located at state or province level in the vast majority of countries, and may be referred to as communities, Länder, cantons, states, etc. Regional authorities in federal countries are often responsible for ECEC in their particular region.

Registration of settings/provisions: The requirement to register a setting or provision into a registry before it can operate and provide ECEC services. Registration can be conducted by government authorities or other professional bodies for registration.

Regulations/recommendations: Various kinds of official documents containing guidelines, obligations and/or recommendations for ECEC institutions. **Regulations** are laws, rules or other orders prescribed by a public authority to regulate conduct. **Recommendations** are official documents proposing the use of specific tools, methods and/or strategies for teaching and learning. Their application is not mandatory (as defined in Eurydice, 2013).

Review: The process of examining, considering and judging a situation or process carefully in order to see, for example, if changes are necessary, to analyse strengths and weaknesses, and to look for improvement.

Science skills: Interest and abilities in understanding the various cycles in nature, as well as in the development of scientific knowledge; the ability to question scientific phenomena and to draw conclusions about scientific subjects. Science skills also refer to the development of awareness of how science and technology shape and affect our material, intellectual and cultural environments and the ability to understand that we all are a part of nature's cycles. These skills also allow an individual to make simple predictions, ask why, comprehend cause and effect, sort, and understand the common properties of living beings.

Screening: A tool designed to identify problems or delays during normal childhood development. Usually involves a short test to tell if a child is learning basic skills when they should, or if there are delays. It might involve questions asked of a child or parent (depending on a child's age) by a professional, or it might involve talk and play with the child during an examination to see how they plays, learns, speaks, behaves and moves. Screening is often used to identify delays or problems, including learning disabilities, speech or language problems, autism, intellectual disability, emotional/behavioural conditions, hearing or vision impairment, or attention deficit hyperactivity disorder (ADHD).

Self-evaluation (or self-assessment): The process in which an ECEC setting evaluates its own performance regarding the accomplishment of certain goals or standards, or a process in which staff members assess their own skills and capabilities as a way to monitor progress, attain goals and foster improvement.

Service quality: The level of quality at setting/provision level. It refers to all the features that are regarded by a country/region/local authority to be of importance for quality, children's environments and experiences that are presumed to be beneficial to their well-being. This most often includes the use of a curriculum, staff characteristics, teacher or assistant behaviours and practices, and the staff-child interactions that form the core of children's ECEC experiences, referred to in the literature as process quality. In addition, quality in most countries involves structural features of the setting, such as space, group size and other standards or regulations, e.g. safety standards (NCES, 1997; OECD, 2006; OECD, 2012).

Socio-economically disadvantaged children: Children from low-income backgrounds ("economically disadvantaged"), from poor areas or regions, with poorly educated parents and/or with one or more immigrant background parent who may face learning disadvantages due to a different language spoken at home (adapted from Bennet, 2012).

Socio-emotional skills: The emotional and social development of a child. The skills include the ability to express and regulate emotions; relations with others (including peers); play with others (including peers); self-concept; development of personality identity; and self-efficacy, which shapes their thinking, feeling and behaviour. They also refer to skills for co-operation and solving problems together. Examples of socio-emotional development include the forming and sustaining of positive relationships; experiencing, managing and expressing emotions; and exploring and engaging with the environment.

Special (educational) needs children (or children with special needs): Special needs children are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged. Often they will be children for whom additional public or private resources (personnel, material or financial) have been provided to support their education.

Split system: Where ECEC services are governed by different ministries or authorities at national/regional level. In many countries with a split system, policies for "care" and "early education" have developed separately and fall under the responsibility of different authorities. Childcare and early education is provided as two different services and for different age groups. For instance, "childcare" for younger children refers most commonly to children under the age of three, while "early education" most commonly refers to children of three years or older.

Staff-child ratio: The number of children per full-time member of staff. This can be a maximum (regulated) number, which indicates the maximum number of children that one full-time member of staff is allowed to be responsible for; or it can be an average: the average number of children a full-time staff member can be responsible for. Ratios can be either for main staff only (such as teacher or caregiver), commonly reported as teacher-child or teacher-student ratios, but can also include auxiliary staff, such as assistants (see also **Child-to-teacher ratio**).

Standardised test: A test designed in such a way that the questions, conditions for administering, scoring procedures and interpretations are consistent and administered and scored in a predetermined, standard manner (OECD, 2012; Zucker, 2004). This means that the same test is given in the same way to all test takers. Standardised assessments are usually administered to large groups of children, and mainly for the purpose of measuring academic achievement and/or comparing members of a cohort (Rosenkvist, 2010) (see also **Test**).

Structural quality in ECEC: Quality aspects that consist of "inputs to process-characteristics that create the framework for the processes that children experience" (Litjens and Taguma, 2010).

These characteristics are not only part of the ECEC location in which children participate, but also part of the environment that surrounds the ECEC setting, e.g. the community. They are often aspects of ECEC that can be regulated, although they may include variables that cannot be regulated.

Subsidised services: Settings that receive grants/funding from the state or other public governmental bodies (e.g. regional/local authorities or municipalities) to finance operation of the ECEC service and ensure ECEC provision at reduced or no cost for parents.

Teachers and comparable practitioners: Pre-primary and primary education teachers are the individuals with the most responsibility for a group of children at the class- or playroom-level. They may also be called pedagogues, educators, childcare practitioners or pedagogical staff in pre-primary education, while the term teacher is almost universally used at the primary level. Data sourced from the OECD's *Education at a Glance* reports exclusively cover this category.

Staff for individual children: These staff members work with some children only, for example children with special educational needs or those who do not speak the language of the centre or school. They may be in the setting or playroom/classroom every day or only for selected time slots or lessons.

Taster days: An offer allowing children to participate in primary school activities for one or more days before starting primary school.

Teacher salary: This can refer to the following:

- **Actual salaries for teachers:** Actual salaries for teachers aged 25-64 refer to the annual average earnings received by full-time teachers aged 25 to 64, before taxes. It is the gross salary from the employee's point of view, since it includes the part of social security contributions and pension scheme contributions that are paid by the employees (even if deducted automatically from the employees' gross salary by the employer). However, the employers' premium for social security and pension is excluded. Actual salaries also include work-related payments, such as annual bonuses, results-related bonuses, extra pay for holidays and sick-leave pay. Income from other sources, such as government social transfers, investment income and any other income that is not directly related to their profession, is not included.
- **Earnings for workers with tertiary education:** Earnings for workers with tertiary education are average earnings for full-time, full-year workers aged 25-64 with an education at ISCED 5/6/7 or 8 level. The relative salary indicator is calculated for the latest year with available earnings data. For countries in which teachers' salaries and workers' earnings information are not available for the same year, the indicator is adjusted for inflation using the deflators for private consumption.
- **Statutory salary:** Statutory salaries refer to scheduled salaries according to official pay scales. The salaries reported are gross (total sum paid by the employer) less the employer's contribution to social security and pension, according to existing salary scales. Salaries are "before tax" (i.e. before deductions for income tax). Salary after 15 years of experience refers to the scheduled annual salary of a full-time classroom teacher. Statutory salaries may refer to the salaries of teachers with the minimum training necessary to be fully qualified or salaries of teachers with the typical qualifications, plus 15 years of experience. Starting salary refers to the average scheduled gross salary per year for a full-time classroom teacher with the minimum training necessary to be fully qualified at the beginning of the teaching career. Maximum salary refers to the maximum scheduled annual salary (top of the salary scale) for a full-time classroom teacher with the maximum qualifications recognised for compensation.

Teaching time/working time:

- **Actual teaching time:** Actual teaching time is the annual average number of hours that full-time teachers spend teaching a group or class of students, including all extra hours, such as overtime. The data can be from administrative registers, statistical databases, representative sample surveys or other representative sources.
- **Statutory teaching time:** Statutory teaching time is defined as the scheduled number of 60-minute hours per year that a full-time teacher teaches a group or class of children as set by policy, teachers' contracts of employment or other official documents.
- **Teaching time:** Teaching time can be defined on a weekly or annual basis. Annual teaching time is normally calculated as the number of teaching days per year multiplied by the number of hours a teacher teaches per day (excluding preparation time and periods of time formally allowed for breaks between lessons or groups of lessons). At the primary level, short breaks between lessons are included if the classroom teacher is responsible for the class during these breaks. The number of teaching days is the number of teaching weeks multiplied by the number of days per week a teacher teaches, less the number of days on which the school is closed for holidays. The number of teaching weeks refers to the number of weeks of instruction excluding holiday weeks that a teacher teaches a group or class of students as set by policy, teachers' contracts of employment or other official documents.
- **Total statutory working time:** Total statutory working time refers to the number of hours that a full-time teacher is expected to work as set by policy. It can be defined on a weekly or annual basis. It does not include paid overtime. According to a country's formal policy, working time can refer to the time directly associated with teaching and other curricular activities for students, such as assignments and tests, the time directly associated with teaching and hours devoted to other activities related to teaching, such as preparing lessons, counselling students, correcting assignments and tests, professional development, meetings with parents, staff meetings and general school tasks.
- **Working time required at school:** Working time required at school refers to the time teachers are required to spend working at school, including teaching and non-teaching time.

Test: A formal assessment, often administered on paper or on computer, intended to measure children's knowledge, skills and/or aptitudes. Tests can be either standardised or not (see also *Standardised Test*).

Tool: See definition of *Instrument*.

Training in transitions: Training in transitions seeks to prepare staff, teacher, leaders and principals for their work on transitions. It may be delivered as part of pre-service training or professional development. Training contents may include, for instance, co-operation with parents, across ECEC centres and primary school; attitudes and reflection with regard to transitions; transition-related evaluation supervision; and quality assurance (see also Neuss et al., 2014)

Transitions: A “change process” that children go through from one educational stage to another over time (Fabian and Dunlop, 2002). This can include horizontal and vertical transitions. Horizontal transitions involve children’s transitions during their everyday lives between, for instance, a pre-primary education setting or primary school and an after-school centre. Vertical transitions refer to the transitions between different educational settings, such as between an ECEC setting and school (Kagan, 1991; Ackesjö, 2013).

Transition practices: Staff and teachers’ practices that intentionally attempt to support children during their transition period across settings (LoCasale-Crouch et al., 2008).

Note

1. Many terms in this glossary were adapted from OECD (2015) *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*; OECD (2016), *Education at a Glance 2016*; as well as the work conducted with the Consortium and Questionnaire Expert Group of the TALIS Starting Strong Survey in preparation for the field trial of this survey.

References

- Ackesjö, H., (2013), "Children crossing borders: School visits as initial incorporation rites in transition to preschool class", *International Journal of Early Childhood*, Vol. 45, pp. 387-410.
- Anders, Y. (2015), "Literature review on pedagogy in OECD countries", background document for the United Kingdom review on pedagogy, OECD, Paris, www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/EDPC/ECEC%282015%297&docLanguage=En.
- Bennett, J. (2012), *Early Childhood Education and Care (ECEC) for Children from Disadvantaged Backgrounds: Findings from a European literature review and two case studies*, Report Commissioned by the European Commission, Brussels, http://ec.europa.eu/dgs/education_culture/repository/education/policy/school/doc/ecec-report_en.pdf.
- Dewey, J. (1938 and 1963), *Experience and Education*, Collier Books, New York.
- Dilger, R.J. and E. Boyd (2014), *Block Grants: Perspectives and Controversies*, Congressional Research Service, Washington, DC.
- Eurydice/European Commission/EACEA/Eurostat (2014), *Key Data on Early Childhood Education and Care in Europe: 2014 Edition*, Eurydice and Eurostat Report, Publications Office of the European Union, Luxembourg.
- Eurydice (2013), "Reference Document 2, Key Data ECEC 2014 – Questionnaire for Eurydice Figures", internal working document, Education, Audiovisual and Culture Executive Agency, Brussels
- Fabian, H. and A.-W. Dunlop (2007) "Outcomes of good practice in transition processes for children entering primary school", *Working Papers in Early Childhood Development*, No 42, Bernard van Leer, The Hague.
- Fabian, H. and A.-W. Dunlop (Eds) (2002) *Transitions in the Early Years. Debating Continuity and Progression for Children in Early Education*, Routledge Falmer, London and New York.
- Kilderry, A. D. (2012), "Teacher decision making in early childhood education", PhD thesis, Queensland University of Technology, Australia.
- Kagan, S.L. (1991), "The strategic importance of linkages and the transition between early childhood programs and early elementary school", in: US Department of Education (1991) *Sticking Together: Strengthening linkages and the transition between early childhood education and early elementary school. Summary of a National Policy Forum*, US Department of Education, Washington, DC.
- Jensen, B. (2009), "A Nordic approach to early childhood education (ECE) and socially endangered children", *European Early Childhood Education Research Journal*, Vol. 17/1, pp. 7-21.
- Lillejord, S., et al. (2017), *Transition from Kindergarten to School - A systematic review*, Knowledge Center for Education, Oslo.
- Litjens, I. (2013), *Literature Review on Monitoring Quality in Early Childhood Education and Care (ECEC)*, OECD, Paris.
- Litjens, I. and M. Taguma (2010), *Revised Literature Overview for the 7th Meeting of the Network on Early Childhood Education and Care*, Paris: OECD.

- LoCasale-Crouch, J., et al. (2008), "Pre-kindergarten teachers' use of transition practices and children's adjustment to kindergarten", *Early Childhood Research Quarterly*, 23(1), 124-139.
- Macmillan (2014), *Macmillan Dictionary*, Macmillan Publishers Ltd., London.
- Middle States Commission on Higher Education (2007), *Student Learning Assessment: Options and Resources*, Middle States Commission on Higher Education, Philadelphia, PA.
- NCES (1997), "Measuring the quality of program environments in Head Start and other early childhood programs: a review and recommendations for future research", *Working Paper No. 97-36*, National Center for Education Statistics, Washington, DC.
- Neuss, N., et al. (2014), *Übergang Kita-Grundschule auf dem Prüfstand - Bestandsaufnahme der Qualifikation pädagogischer Fachkräfte in Deutschland* [Bringing transitions from ECEC centres to primary school to the test - an inventory of the qualifications of pedagogical staff in Germany], Springer Fachmedien, Wiesbaden.
- OECD (2017), *OECD Glossary of Statistical Terms*, OECD Publishing, Paris, <http://stats.oecd.org/glossary/about.asp>.
- OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.
- OECD (2015a), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, OECD Publishing, Paris, DOI: <http://dx.doi.org/10.1787/9789264233515-en>.
- OECD (2015b), *Education at a Glance 2015: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2015-en>.
- OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264190658-en>.
- OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD (2006), *Starting Strong II: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264035461-en>.
- OECD (2005), *Formative Assessment: Improving Learning in Secondary Classrooms*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264007413-en>.
- OECD (2004), *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264104112-en>.
- OECD (2001), *Starting Strong: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264192829-en>.
- OECD/Eurostat/UNESCO Institute for Statistics (2015), *ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264228368-en>.
- Rosenkvist, M.A. (2010), "Using student test results for accountability and improvement: a literature review", *OECD Education Working Papers*, No. 54, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5km4htzbv30-en>.
- UNESCO IBE (2016), "What makes a quality curriculum?", *Current and Critical Issues in Curriculum and Learning*, In Progress Reflection No.2, UNESCO International Bureau of Education, Switzerland, <http://unesdoc.unesco.org/images/0024/002439/243975e.pdf>.

GLOSSARY OF TERMS

WHO (World Health Organization) (2006), *Constitution of the World Health Organization*, World Health Organization, Geneva, www.who.int/governance/eb/who_constitution_en.pdf.

Zucker, S. (2004), *Administration Practices for Standardized Assessments*, Pearson Assessment Report, Pearson Education, San Antonio, TX.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

Starting Strong V

TRANSITIONS FROM EARLY CHILDHOOD EDUCATION AND CARE TO PRIMARY EDUCATION

The transition from early childhood education to primary school is a big step for all children, and a step which more and more children are having to take. Quality transitions should be well-prepared and child-centred, managed by trained staff collaborating with one another, and guided by an appropriate and aligned curriculum. Transitions like these enhance the likelihood that the positive impacts of early learning and care will last through primary school and beyond. While transition policies have been on the agenda of many countries over the past decade, little research has been done into how OECD countries design, implement, manage and monitor transitions. Filling these gaps is important for designing early years' policies that are coherent, equitable and sustainable.

This report takes stock of and compares the situation across 30 OECD and partner countries, drawing on in-depth country reports and a questionnaire on transition policies and practices. It focuses on the organisation and governance of transitions; and the policies and strategies to ensure professional, pedagogical and developmental continuity between early childhood education and care settings and schools. The report describes the main policy challenges highlighted by participating countries, along with a wealth of practical strategies for tackling them. The publication concludes with six "cross-cutting" pointers to guide future policy development.

Consult this publication on line at <http://dx.doi.org/10.1787/9789264276253-en>.

This work is published on the OECD iLibrary, which gathers all OECD books, periodicals and statistical databases. Visit www.oecd-ilibrary.org for more information.

