

## 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.*

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## 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.*

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### 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,<sup>1</sup> 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, Ereky-Stevens and Aricescu, 2015). These areas are most often referred to in European ECEC curricula (Sylva, Ereky-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 activities<sup>2</sup> (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”<sup>3</sup> 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).<sup>4</sup> 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, Jackowitz 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

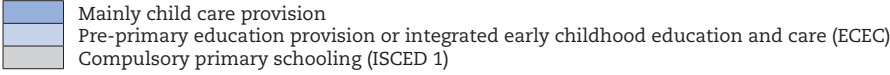
within ECEC and transitions from ECEC to primary education are paved with multiple combinations of curricular documents.

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,<sup>5</sup> 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)**

Type of curriculum frameworks in place in jurisdictions in ECEC and in primary education				Jurisdictions
	ISCED 01 Early childhood educational development and care	ISCED 02 Pre-primary education	ISCED 1 primary education	
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 <sup>2</sup> , 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, <b>The Netherlands</b> , New Zealand, Sweden, Switzerland, Scotland (UK) <sup>2</sup> , 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)**

Type of curriculum frameworks in place in jurisdictions in ECEC and in primary education				Jurisdictions
	ISCED 01 Early childhood educational development and care	ISCED 02 Pre-primary education	ISCED 1 primary education	
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, <b>British Columbia</b> , Manitoba, Newfoundland and Labrador, Northwest territories, Nova Scotia, Nunavut, Ontario, and <b>Yukon</b> . Croatia, Germany: Baden-Württemberg, Bavaria, Brandenburg, Hamburg, Hesse, Mecklenburg-Western Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saxony, Saxony-Anhalt, Schleswig-Holstein, and Thüringen. Ireland <sup>3</sup> , 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**

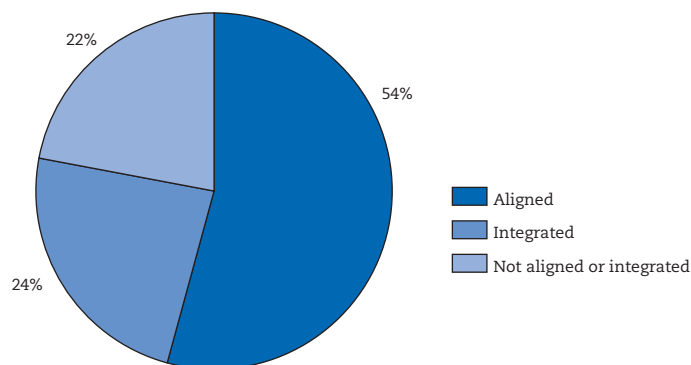
Curricular alignment refers to the coherence and continuity between ECEC and primary school curricula in terms of content, pedagogy and/or development goals during the transition year (i.e., covering at least the last year of ECEC and the first year of primary education). Figure 4.1 shows that in 78% 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.

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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).<sup>6</sup> 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](http://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](http://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.<sup>7</sup> 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](http://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](http://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).

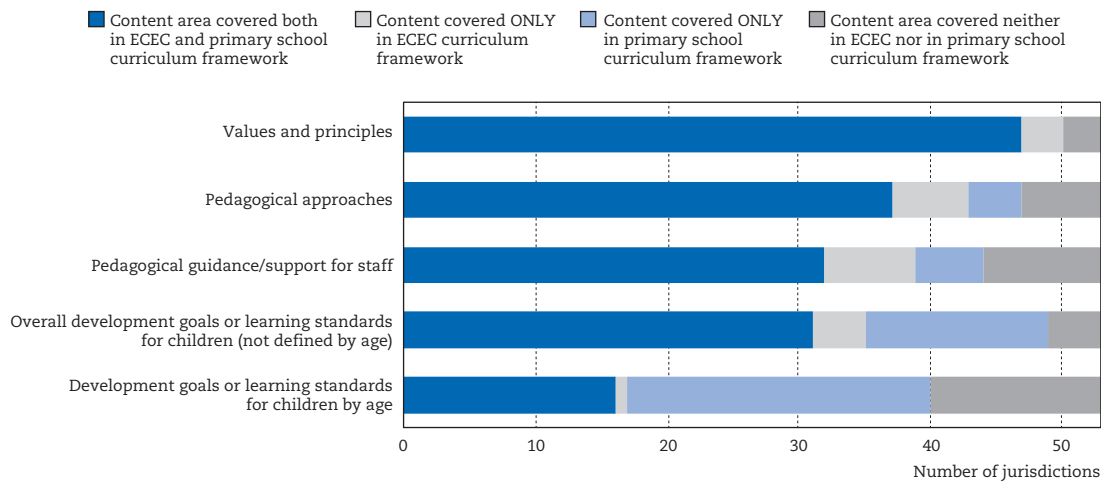
**Early childhood education and care and primary curricula generally share values, pedagogical approaches and learning goals**

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.

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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 curricula 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 (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.

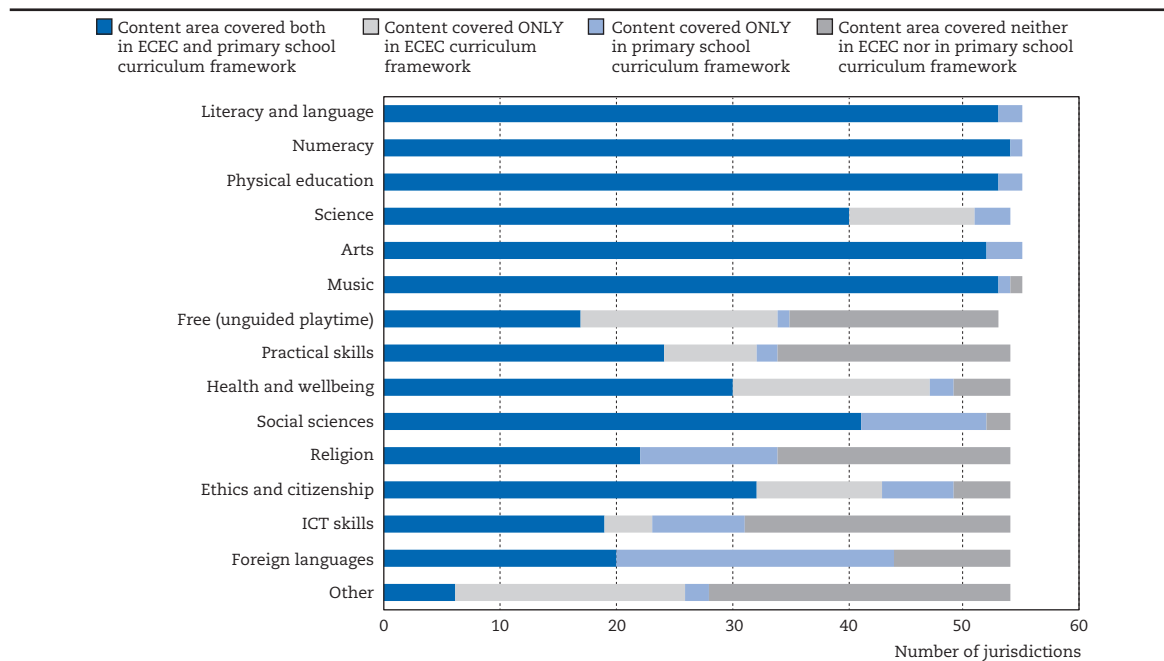
In Wales, individual children's learning continuation is guaranteed by the use of the Foundation Phase Profile. The Foundation Phase Profile is a nationally consistent tool that aligns with the end of Foundation Phase Outcomes and supports the assessment of children's learning and development throughout 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.

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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.

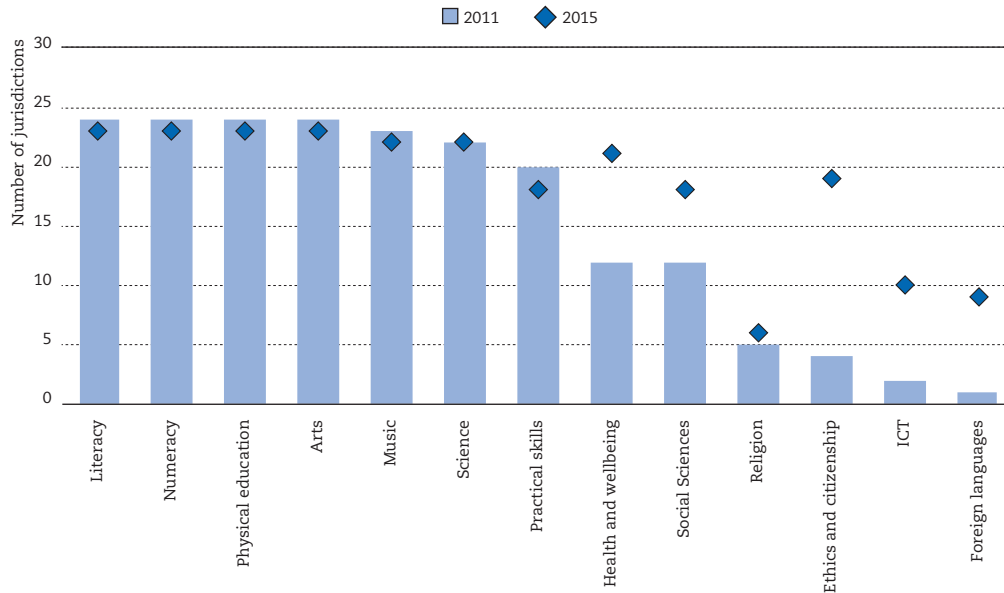
At the jurisdiction level, discrepancies between the content of ECEC and primary school curricula can take a number of forms. For example, in Japan there is a clear pattern of citing the majority of contents (subject areas) in primary school curriculum. Free (unguided) play time is the only content cited 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]* and *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.

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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.

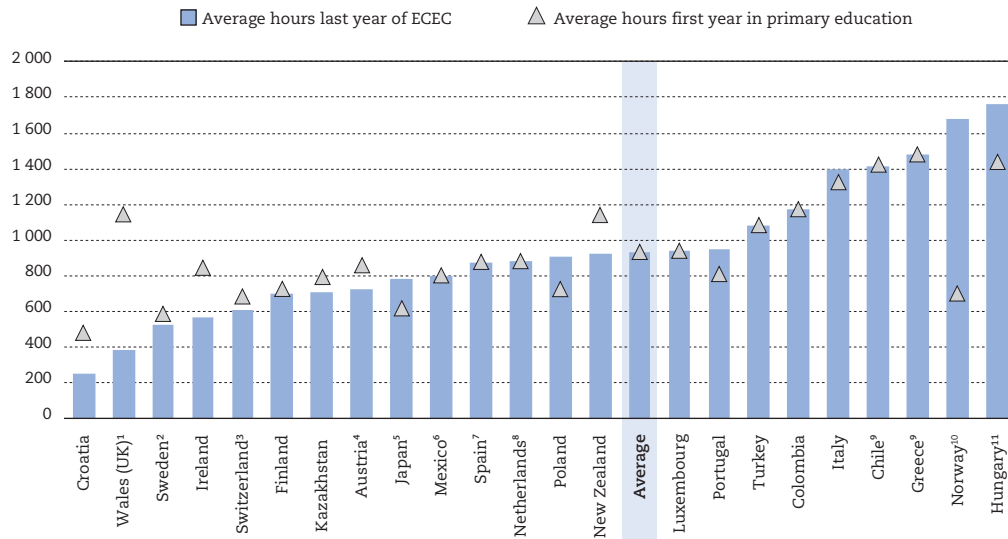
### ***In one-fifth of jurisdictions, children spend longer hours in early childhood education and care than in primary school***

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. Table 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.

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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).

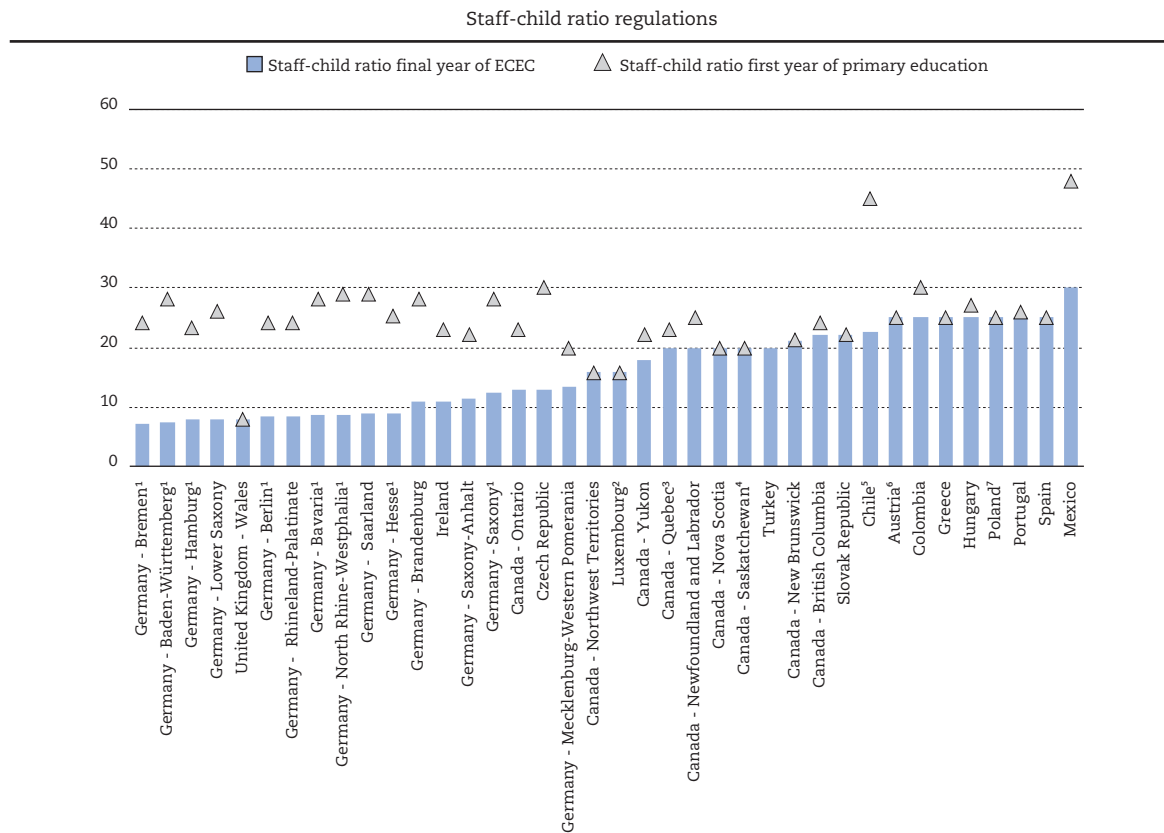
#### ***Staff-child ratio***

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 ratio<sup>9</sup> 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.

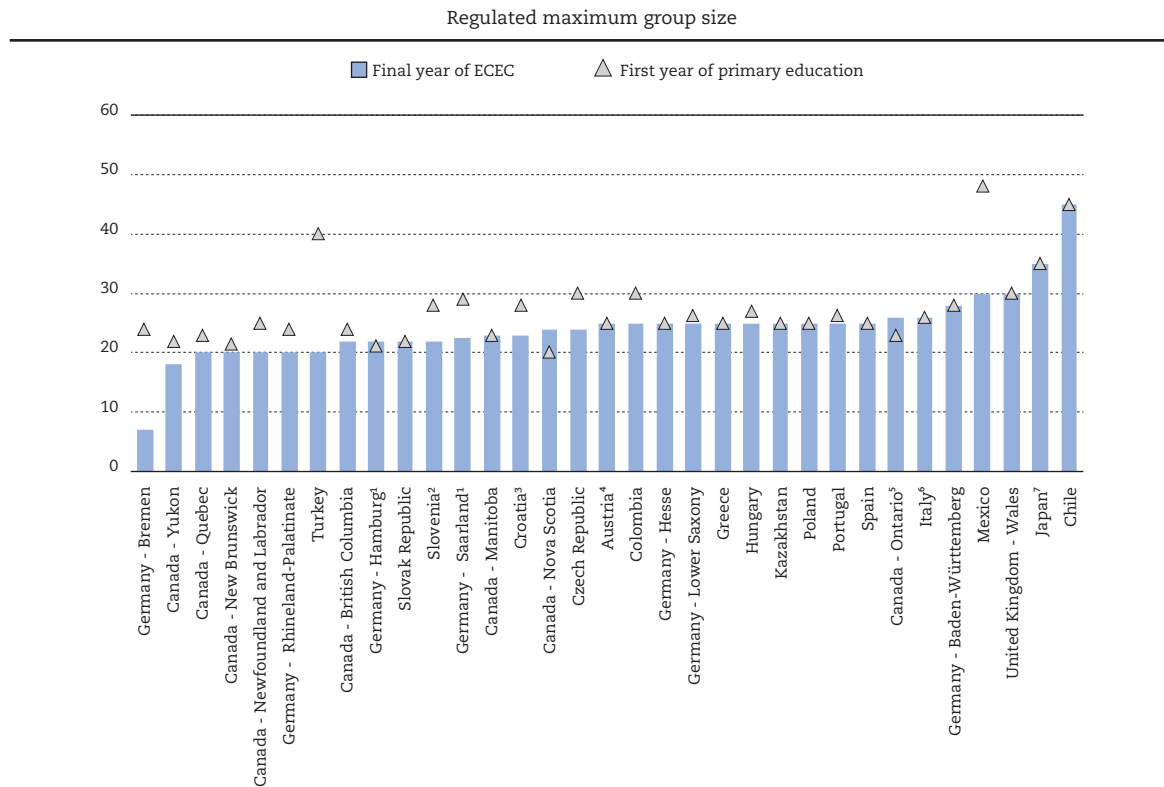
Source: OECD Network on ECEC, "Survey on transitions between ECEC and primary education", June 2016.

StatLink <http://dx.doi.org/10.1787/888933495667>

### 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.

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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
<ul style="list-style-type: none"> <li>• Differences and inconsistencies in curricula</li> </ul>	<ul style="list-style-type: none"> <li>• Develop an integrated curriculum framework and national guidelines</li> <li>• Invest in local knowledge and innovations</li> </ul>
<ul style="list-style-type: none"> <li>• Lack of shared pedagogical understanding between the two systems</li> </ul>	<ul style="list-style-type: none"> <li>• Reform curricula to ensure greater pedagogical continuity</li> <li>• Provide opportunities for staff collaboration</li> <li>• Emphasise the role of primary school in receiving children</li> </ul>
<ul style="list-style-type: none"> <li>• Inconsistent delivery of pedagogy during transition</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure consistency in structures</li> <li>• Create collaborative learning strategies</li> </ul>

### 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:

- 1) 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 education<sup>9</sup> 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
<b>WEB</b>	Table 4.A.2	Curricular continuity between contents of ECEC and primary school curriculum frameworks
<b>WEB</b>	Table 4.A.3	Average hours of participation in last year of ECEC and first year of primary education, 2014
<b>WEB</b>	Table 4.A.4	Regulated staff-child ratio in final year of ECEC (ISCED 0.2) and first year of primary school (ISCED 1)
<b>WEB</b>	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	Germany – North Rhine-Westphalia	1
Belgium – Flemish Community	0	Germany – Rhineland-Palatinate	1
Canada – Alberta	2	Germany – Saarland	1
Canada – British Columbia*	2	Germany – Saxony	1
Canada – Manitoba	1	Germany – Saxony-Anhalt	1
Canada – New Brunswick*	2	Germany – Schleswig-Holstein	1
Canada – Newfoundland and Labrador	0	Germany – Thuringia	1
Canada – Northwest Territories	1	Greece	1
Canada – Nova Scotia	0	Hungary	0
Canada – Nunavut	1	Ireland*	0
Canada – Ontario	1	Italy	2
Canada – Prince Edward Island	1	Japan	1
Canada – Quebec	2	Kazakhstan	0
Canada – Saskatchewan	0	Luxembourg	2
Canada – Yukon*	2	Mexico	1
Chile	1	New Zealand	1
Colombia*	1	Netherlands	0
Croatia*	2	Norway	0
Czech Republic	0	Poland*	2
Denmark	0	Portugal	1
Finland	1	Slovak Republic	0
Germany – Baden-Württemberg	1	Slovenia	1
Germany – Bavaria	1	Spain	1
Germany – Berlin	1	Sweden*	2
Germany – Brandenburg	1	Switzerland – French-speaking cantons	2
Germany – Bremen	1	Switzerland – German speaking cantons	2
Germany – Hamburg	1	Switzerland – Italian speaking cantons	2
Germany – Hesse	1	Turkey	1
Germany – Lower Saxony	1	United Kingdom – Wales	2
Germany – Mecklenburg-Western Pomerania	1		

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](http://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

Jurisdiction	Child care only						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					
<b>Australia</b>	Belonging, Being, Becoming - Early Years Learning Framework for Australia or equivalent state-based approved learning framework						The Australian Curriculum											
<b>Austria</b>	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))						Lehrplan der Volksschule (Curriculum of Primary School)					
<b>Belgium – Flemish Community</b>	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)				Eindtermen (attainment targets for 6-12 years)											
<b>Belgium-French Community</b>	Code de qualité (Oser/viser la qualité)		Le décret mission, le programme du réseau de l'école et le programme de l'école															
<b>Canada - Alberta</b>					Kindergarten program statement													
					Alberta Program of		Studies up to 18											
					Standards for the Provision of Early Childhood Special Education													
	The Alberta Early Learning and Childcare Curriculum Framework: Play, Participation and Possibilities																	
<b>Canada – British Columbia</b>	British Columbia Early Learning Framework (Optional)						BC Ministry of Education Curriculum (Kindergarten – 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)

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
Canada - Manitoba	Starting Early, Starting Strong: A Guide for Play-Based Early Learning in Manitoba Birth to Six												
	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				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	
						A Time for Learning, a Time for Joy: A Resource for Kindergarten Teachers							
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												
	Regulated Child Care Program Standards (Birth to age 12.11 years)												
				KinderStart Program Guide 3.9 years - 5 years		Completely Kindergarten Guide (2010) 4.9 years - 5.9 years		Curriculum for Compulsory school Grades 1-12 (students with exceptionalities may continue to age 21 yrs)					up to 18
Canada - Northwest Territories				Integrated Kindergarten Curriculum			Each curricular area currently has a separate curricular document						
Canada - Nova Scotia				Specifically for Grade Primary as a component of the Public			teased out School Program		Nova Scotia Public School Program				up to 18
Canada - Nunavut						Elementary		Teachers Planning Guide					up to 18
						Curriculum		Foundations					up to 18
						1996 IQ		Curriculum Framework					up to 18
						Subject		Curriculums					up to 18
Canada - Ontario						The Kindergarten Program 2016		The Ontario Curriculum Grades 1-8					
	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		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	Acceuilir 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 (Kindergarten - 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)

Jurisdiction	Child care only						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					
<b>Chile</b>	Bases Curriculares de Educación Párvularia (Early Childhood Education Curricular Bases)						Bases Curriculares para la Educación Básica (Curricular Bases for Primary Education)											
<b>Colombia</b>	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)											
<b>Croatia</b>	Strategija obrazovanja, znanosti i tehnologije (National Strategy for Science, Education and Sports (covers all children from 6 months to 18 years))												up to 18					
	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))						up to 18					
<b>Czech Republic</b>	Framework Educational Programme for Preschool Education (FEP PE)						Framework Educational Programme for Basic Education (FEP BE)						up to 15					
<b>Denmark</b>	Pædagogiske læreplaner (pedagogical curriculum)						Fælles Mål (Common Objectives) for each grade in primary school, including preschool class						up to 16					
<b>Finland</b>	Varhaiskasvatusuunnitelman 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)						up to 16			
<b>France</b>	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) )"											
<b>Germany (Baden-Württemberg)</b>	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)"											
							Bildungsplan für die Grundschule (Curriculum for primary education)											
<b>Germany (Bavaria)</b>	Gemeinsam Verantwortung tragen – Bayerische Leitlinien für die Bildung und Erziehung von Kindern Ende der Grundschulzeit (Share responsibility – Bavarian guidelines for education and care						bis zum Ende der Grundschulzeit Erziehung von Kindern bis zum of children until the end of primary school)											
							LehrplanPLUS Grundschule (Curriculum plus for primary education)											
<b>Germany (Berlin)</b>	Berliner Bildungsprogramm für Kitas und Kindertagespflege (Berlin educational programme for ECEC centres and family daycare)						Rahmenlehrpläne (Framework Curriculum)											
<b>Germany (Brandenburg)</b>	Grundsätze elementarer Bildung in Einrichtungen der Kindertagesbetreuung im Land Brandenburg (principles of elementary education in ECEC centres in Brandenburg)																	
							Rahmenlehrpläne (Framework Curriculum)											
<b>Germany (Bremen)</b>	Rahmenplan für Bildung und Erziehung im Elementarbereich – Bremen (Framework curriculum for education and care in the elementary sector – Bremen)						Rahmenlehrpläne (Framework Curriculum)											
<b>Germany (Hamburg)</b>	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)						up to 15					
							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						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					
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)											
Germany (Rhineland-Palatinate)	Bildungs- und Erziehungsempfehlungen für Kindertagesstätten in Rheinland-Pfalz (Recommendations on education and care in ECEC settings in Rhineland-Palatinate)						Rahmenplan Grundschule (Framework curriculum for primary education)						up to 15					
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)											
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)						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)						Lehrplan Grundschule - Grundsatzband						up to 15					
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)						Lehrpläne für die Primarstufe (Curriculum for primary education)						up to 15					
Germany (Thuringia)	Thüringer Bildungsplan bis 18 Jahre. Bildungsansprüche von Kindern und Jugendlichen (Thuringian curriculum upto 18 years. Educational demands of children and adolescents)						Thüringer Lehrpläne für die Grundschule (Curriculum for primary education in Thuringia)						up to 18					
Greece							Dimotiko Curriculum for Sxoleio Preschool Education						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	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p><span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6; border: 1px solid black; margin-right: 5px;"></span> Child care only</p> <p><span style="display: inline-block; width: 15px; height: 10px; background-color: #4682B4; border: 1px solid black; margin-right: 5px;"></span> Early childhood education and/or integrated early childhood education and care</p> <p><span style="display: inline-block; width: 15px; height: 10px; background-color: #FFFFFF; border: 1px solid black; margin-right: 5px;"></span> No standard curriculum is in place for the specified age group</p> </div> <div style="width: 45%;"> <p><span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6; border: 1px solid black; margin-right: 5px;"></span> Compulsory ECEC</p> <p><span style="display: inline-block; width: 15px; height: 10px; background-color: #A9A9A9; border: 1px solid black; margin-right: 5px;"></span> Compulsory primary schooling</p> </div> </div>												
	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
<b>Hungary</b>	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
<b>Ireland</b>	Early Childhood Curriculum Framework: Aistear						Primary School Curriculum						
<b>Italy</b>				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)						up to 14
<b>Japan</b>	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												
<b>Kazakhstan</b>	Типовая учебная программа дошкольного воспитания и обучения (Standard curriculum for early childhood education and care)									Different curricula for different subjects for grades 1-4			
<b>Korea</b>	(Standardised childcare curriculum)			(Nuri Curriculum) (not mandatory)									
<b>Luxembourg</b>	Cadre de reference pour l'éducation non-formelle Bildungsrahmenplan für non-formale Bildung (Framework for non-formal education for young children, school-aged children and youth)			des enfants et des jeunes im Kindes und Jugendalter (0 - 12)						Plan d'études de l'enseignement fondamental (National curriculum for fundamental education) <sup>*)</sup>			
<b>Mexico</b>	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						
<b>Netherlands</b>				2.5y Targeted ECEC approved curriculum		Kern doelen* (Core Objectives 4-12 years)							
<b>New Zealand</b>	Te Whāriki (early childhood curriculum)				New Zealand Curriculum and Te Marautanga o Aotearoa (the national curriculum for Māori medium schooling)		up to 18						
<b>Norway</b>	Rammeplan for barnehagens innhold og oppgaver (Framework Plan for the Content and Tasks of Kindergartens)						Kunnskapsløftet (The knowledge promotion curriculum)						up to 18
<b>Poland</b>				Podstawa programowa wychowania przedszkolnego (Core curriculum for pre-school and general education in individual types of schools)			oraz kształcenia ogólnego w poszczególnych typach szkół			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			
<b>Portugal</b>				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						
<b>Slovak Republic</b>				Štátny vzdelávací program pre predprimárne vzdelávanie v materských školách (State Education Programme for Pre-primary Education in Kindergarten)			Štátny vzdelávací program pre primárne vzdelávanie (State Education Programme for Primary Education)						

Table 4.A.6 The curricula in place in ECEC and primary education across 63 jurisdictions (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	11 year-olds	12 year-olds
		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					
<b>Slovenia</b>		Kurikulum za vrtnice (Kindergarten Curriculum)					Program osnovne šole (Basic school programme) up to 15						
<b>Spain</b>					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)						
<b>Sweden</b>		Läroplan för förskolan (Lpfö 98, revised 2010) (Curriculum for the Preschool)					Läroplan Compulsory		för grundskolan, förskoleklassen och fritidshemmet (Lgr 11). (Curriculum for the school, the Preschool class and the Out of school centre)				up to 16
<b>Switzerland</b>				Lehrplan 21 (curriculum for german-speaking cantons) Plan d'études romand (curriculum for french-speaking cantons) Piano di studio (curriculum for italian-speaking cantons)			Up to 15						
<b>Turkey</b>	Aylık çocuklar için 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						
<b>United Kingdom-England</b>	Early Years Foundation Stage Statutory Framework												
<b>United Kingdom-Scotland</b>	Pre-birth to three - staff guidelines					Curriculum for Excellence		Up to 18					
<b>United Kingdom-Wales</b>				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 ECL 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](http://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	<i>The Framework Curriculum for ECEC (2009)</i>	Charlotte Bühler Institut (2009). <i>Bundesländerübergreifender BildungsRahmenPlan für elementare Bildungseinrichtungen in Österreich</i> [Framework curriculum for ECEC institutions in Austria], Charlotte Bühler Institut, Vienna, <a href="http://www.charlotte-buehler-institut.at/service/index.htm">www.charlotte-buehler-institut.at/service/index.htm</a>
	<i>The Addition to the Austrian Framework Curriculum for five to six-year-olds (2010)</i>	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, <a href="http://www.charlotte-buehler-institut.at/service/index.htm">www.charlotte-buehler-institut.at/service/index.htm</a>
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 læreplaner)	
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, <a href="http://www.oph.fi/english/curricula_and_qualifications/basic_education">www.oph.fi/english/curricula_and_qualifications/basic_education</a>
	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, <a href="http://www.oph.fi/english/education_system/early_childhood_education">www.oph.fi/english/education_system/early_childhood_education</a>
	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, <a href="http://www.oph.fi/english/curricula_and_qualifications/pre-primary%20_education">www.oph.fi/english/curricula_and_qualifications/pre-primary%20_education</a>
Italy	National Curricular Guidelines for Preschool and for the First Cycle of Education (Indicazioni Nazionali per il curricolo della scuola dell'infanzia e del primo ciclo di istruzione)	
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. 2006.03.01 nr. 0266</i> . [The Framework Plan for the Content and Tasks of Kindergartens], <a href="http://www.udir.no/globalassets/upload/barnehage/rammeplan/framework_plan_for_the_content_and_tasks_of_kindergarten_2011_rammeplan_engelsk.pdf">www.udir.no/globalassets/upload/barnehage/rammeplan/framework_plan_for_the_content_and_tasks_of_kindergarten_2011_rammeplan_engelsk.pdf</a>
	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. <a href="http://www.udir.no/Stottemeny/English/Curriculum-in-English/">www.udir.no/Stottemeny/English/Curriculum-in-English/</a>

4. PEDAGOGICAL CONTINUITY IN TRANSITIONS FROM EARLY CHILDHOOD EDUCATION AND CARE TO PRIMARY SCHOOL

Jurisdiction	Curriculum (year)	Reference, if available
Nunavut (Canada)	Curriculum Foundations <i>The Elementary Teacher's Planning Guide</i>	
Poland	Core Curriculum for Preschool and General Education in Individual Types of Schools  Core Curriculum for Preschool Education in Kindergartens and Other Forms of Preschool Settings	
Portugal	Curriculum for Preschool Education	Lopes da Silva, I., L. Marques, L. Mata and M. Rosa (2016), <i>Orientações Curriculares para a Educação Pré-Escolar</i> [Curriculum for Preschool Education], Direção-General da Educação, Ministério da Educação, Lisbon.
Quebec (Canada)	Meeting Early Childhood Needs: Québec's Educational Program for Childcare Services  Programme de formation de l'école québécoise	
Scotland (United Kingdom)	Curriculum for Excellence	Education Scotland (2016), <i>Curriculum for Excellence: A Statement for Practitioners from HM Chief Inspector of Education</i> , Education Scotland, Livingston, <a href="https://education.gov.scot/improvement/Documents/cfestatement.pdf">https://education.gov.scot/improvement/Documents/cfestatement.pdf</a>
Slovenia	Kindergarten curriculum	Ministry of Education, Science and Sport (1999), <i>Kurikulum za vrtce</i> [Kindergarten Curriculum], Ministry of Education, Science and Sport, Ljubljana, <a href="http://www.mizs.gov.si/en/legislation_and_documents/">www.mizs.gov.si/en/legislation_and_documents/</a>
Sweden	Curriculum for the Preschool in Sweden, Lpfö 98  Curriculum for the compulsory school, preschool class and the recreation centre in Sweden, Lgr11	Skolverket (2010), <i>Curriculum for the Preschool in Sweden</i> , Lpfö 98, (2010, rev.), Skolverket, Stockholm, <a href="http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FRecord%3Fk%3D2704">www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FRecord%3Fk%3D2704</a>  Skolverket (2011), <i>Curriculum for the compulsory school, preschool class and the recreation centre in Sweden</i> , Lgr11, Skolverket, Stockholm, <a href="http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FRecord%3Fk%3D2687">www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FRecord%3Fk%3D2687</a>
Wales (United Kingdom)	Foundation Phase Framework (2015)	Welsh Government (2015), <i>Foundation Phase Framework</i> , Welsh Government, Cardiff, <a href="http://gov.wales/topics/educationandskills/earlyyearshome/foundation-phase/?lang=en">http://gov.wales/topics/educationandskills/earlyyearshome/foundation-phase/?lang=en</a> .

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.



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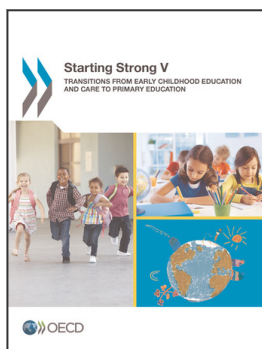


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