Quality Matters in Early Childhood Education and Care

NEW ZEALAND

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OECD

Quality Matters in Early Childhood Education and Care: New Zealand 2012

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and Kelly Makowiecki



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FOREWORD

This publication is intended to be a quick reference guide for anyone with a role to play in encouraging quality through New Zealand's early childhood education (ECE) curriculum.

There is a growing body of evidence that children starting strong in their learning and well-being will have better outcomes when they grow older. Such evidence has driven policy makers to design an early intervention and re-think their education spending patterns to gain "value for money". At the same time, research emphasises that the benefits from early interventions are conditional on the level of "quality" of ECE that children experience.

What does "quality" mean? *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care* (ECEC) has identified five policy levers that can encourage quality in ECEC, having positive effects on early child development and learning.

- Policy Lever 1: Setting out quality goals and regulations
- Policy Lever 2: Designing and implementing curriculum and standards
- Policy Lever 3: Improving qualifications, training and working conditions
- Policy Lever 4: Engaging families and communities
- Policy Lever 5: Advancing data collection, research and monitoring

Of the five policy levers, New Zealand has selected **Policy Lever 2: Designing and implementing curriculum and standards** for its current policy focus.

This policy profile for New Zealand would not have been possible without the support of the national authority and the stakeholders involved. The OECD Secretariat would like to thank the national co-ordinators, Richard Walley, Julie Keenan, Ann Armstrong and David Scott, for their work in providing information. We would also like to thank all those who gave their time to respond to our many questions, provide comments on preliminary drafts and validate the information for accuracy. We would also like to thank consultants Janice Heejin Kim and Matias Egeland who worked on sections of the preliminary drafts as part of the OECD team on Early Childhood Education and Care.

The online version of the quality toolbox can be found at: **www.oecd.org/edu/earlychildhood/toolbox**. The online toolbox has additional information, such as a country materials page where actual documents from OECD countries are presented, including curricula, regulatory frameworks and data systems information. All information related to the OECD Network on ECEC is available at: **www.oecd.org/edu/earlychildhood**.

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EXECUTIVE SUMMARY

A common curriculum framework helps ensure an even level of quality across different providers, supports staff to provide stimulating environments for children and supports parents to better engage.

Early childhood education (ECE) is receiving increased policy interest in New Zealand, as improving quality in the ECE sector is a subject of growing importance. New Zealand considers improving quality through curriculum as a priority, as it can ensure even quality across different settings. It can also help staff clarify their pedagogical aims, focus on the most important aspects of child development and respond adequately to children's needs. It can also ensure continuity between ECE and primary schooling. Additionally, the framework helps parents learn about child development and encourages them to ensure a good home learning environment. It can also act as a bridge between staff and parents for information sharing about what children do in centres and facilitate needs-based interventions.

Research-based curriculum design can ensure a good mix of short- and long-term benefits and of cognitive/social benefits. There is a need to consolidate the "added value" of different approaches.

Research indicates that the brain sensitivity to language, numeracy, social skills and emotional control peak before the age of four, which suggests that ECE matters greatly for children's development of key skills and abilities. Combining child- and staff-initiated contents and activities maximises cognitive learning and social outcomes: child-initiated activities can have long-term benefits. There is a need to think beyond curriculum dichotomies (*e.g.*, academic-oriented vs. comprehensive approaches, staff-initiated instruction vs. child-initiated activities, etc.) and consolidate the "added value" of individual approaches.

New Zealand could share the good examples that distinguish its curriculum, such as implementing an integrated ECE framework; providing age-appropriate content; and recognising the importance of respecting different cultures and values.

New Zealand's *Te Whāriki* is a progressive and cogent document regarding the orientation and aims of ECE. The document clearly lays out what is expected from staff and child development with useful examples. The curriculum provides continuous child development through the use of one national framework for ECE; putting the community at the centre of the curriculum; strongly focusing on well-being and learning; ensuring age-appropriate content; emphasising the importance of tolerance and respect for cultural values and diversity; and aligning the ECE curriculum with primary schooling.

International comparative data suggests potential areas of reflection for New Zealand, such as improving parental engagement in curriculum; addressing children's agency more explicitly; and strengthening the communication and leadership skills of staff.

Capitalising upon its strengths, New Zealand could further enhance quality through its curriculum. Other country practices would suggest such options as: 1) strengthening parental involvement in curriculum design or implementation; 2) reflecting on children's agency and child-initiated play; and 3) further improving communication and leadership skills of staff for effective implementation.

New Zealand has undertaken measures to enhance quality through curriculum by, among others, developing age-appropriate content with clear examples for staff; aligning the framework with primary schooling; and providing implementation training.

Common challenges countries face in enhancing quality in ECE curriculum are: 1) defining goals and content; 2) curriculum alignment for continuous child development; 3) effective implementation; and 4) systematic evaluation and assessment. New Zealand has made several efforts in tackling these challenges by, for example, covering the whole early childhood education age range as an integrated system with one national framework; specifying age-appropriate learning areas while focusing on well-being; providing extensive practical information online for ECE staff and parents; and developing an assessment practice for staff.

To further their efforts, New Zealand could consider strategies implemented by British Columbia (Canada), Manitoba (Canada), Scotland (United Kingdom) and Sweden, such as reviewing the curriculum to improve relevance to meet staff needs; developing a framework covering different levels of education; piloting before implementing; and including "curriculum" as an integral part of assessment and evaluation.

INTRODUCTION

Aim of the policy profile

Early childhood education and care (ECEC), or early childhood education (ECE) as it is referred to in New Zealand, has become a growing policy priority in many countries. A growing body of research recognises that it provides a wide range of benefits, including social and economic benefits, better child well-being and learning outcomes as a foundation for lifelong learning, more equitable outcomes and reduction of poverty, and increased intergenerational social mobility. But these positive benefits are directly related to the "quality" of ECE.

Definitions of quality differ across countries and across different stakeholder groups depending on beliefs, values, a country's (or region's) socio-economic context, and the needs of the community of users. While definitions should be interpreted with caution and sensitivity when comparing cross-country practices, the OECD has taken a two-tier approach to define "quality" to proceed policy discussions. Therefore, this policy profile considers quality in terms of "structural quality"[1] and "process quality"[2], and sets out "child development" or "child outcome" as quality targets.

Based on international literature review findings, the OECD has identified five levers as key policies to encourage quality in ECE:

1) Setting out quality goals and regulations
2) Designing and implementing curriculum and standards
3) Improving qualifications, training and working conditions
4) Engaging families and communities
5) Advancing data collection, research and monitoring

Of the five levers, New Zealand has selected "designing and implementing curriculum and standards" to be the theme of its policy profile. As reference countries in focus for international comparison, New Zealand has selected Scotland (United Kingdom), Sweden, Manitoba (Canada) and British Columbia (Canada).

Structure of the report

This report consists of three chapters:

Chapter 1: What does research say?

This chapter aims to help you to brief political leaders, stakeholders and the media about the latest research and explain why a framework, such as curriculum or learning standards, matters for better child development. It includes an overview of research findings on why curriculum matters, what the effects of different curricula are on child development and the

quality of ECE provision, which aspects matter in curriculum, policy implications from research and knowledge gaps in current research.

Chapter 2: Where does New Zealand stand compared to other countries?

Chapter two provides an international comparative overview of where your country stands regarding curriculum design. It identifies the strengths and areas for reflection for New Zealand in comparison with the selected reference countries. The section can provide an insight into which aspects of curriculum New Zealand might consider taking policy action on, and it can raise awareness about policy issues.

Chapter 3: What are the challenges and strategies?

Chapter three presents the challenges countries have faced in designing, revising and implementing curriculum and gives alternative approaches to overcome these challenges. This section provides a quick overview of what Scotland (United Kingdom), Sweden, Manitoba (Canada) and British Columbia (Canada) have done to tackle challenges in designing, revising or implementing curriculum.

NOTES

1 Structural quality consists of "inputs to process-characteristics which create the framework for the processes that children experience". These characteristics are not only part of the ECEC location in which children participate, but they are part of the environment that surrounds the ECEC setting, *e.g.*, the community. They are often aspects of ECEC that can be regulated, though they may contain variables which cannot be regulated (Litjens and Taguma, 2010).

2 Process quality consists of what children actually experience in their programmes – that which happens within a setting. These experiences are thought to have an influence on children's well-being and development (Litjens and Taguma, 2010).

CHAPTER 1

WHAT DOES RESEARCH SAY?

*Curriculum and standards can reinforce positive impact on children's learning and development. They can: i) ensure even quality across different settings; ii) give guidance to staff on how to enhance children's learning and well-being; and iii) inform parents of their children's learning and development. Countries take different approaches in designing curriculum. There is a need to think beyond curriculum dichotomies (*e.g.*, academic-oriented vs. comprehensive approaches, staff-initiated instruction vs. child-initiated activities, etc.) and consolidate the "added value" of individual approaches.*

What is curriculum?

Curriculum refers to the contents and methods that substantiate children's learning and development. It answers the questions "what to teach?" and "how to teach it?" (NIEER, 2007). It is a complex concept, especially in ECE, containing multiple components, such as ECE goals, content and pedagogical practices (Litjens and Taguma, 2010).

What is at stake?

There is growing consensus on the importance of an explicit curriculum with clear purpose, goals and approaches for zero-to-school-age children (Bertrand, 2007). Most OECD countries now use a curriculum in early childhood services, especially as children grow older, that is to say, that some structuring and orientation of children's experience towards educational aims is generally accepted. Currently, there is little pedagogical direction for younger children, although many neurological developments take place prior to age of three or four (OECD, 2006). Curricula are influenced by many factors, including society's values, content standards, research findings, community expectations, culture and language. Although these factors differ per country, state, region and even programme, high-quality, well-implemented ECE curricula provide developmentally appropriate support and cognitive challenges that can lead to positive child outcomes (Frede, 1998).

With trends toward decentralisation and diversification of policy and provision, there is more variation in programming and quality at the local level. A common framework can help ensure an even level of quality across different forms of provision and for different groups of children, while allowing for adaptation to local needs and circumstances. A clear view and articulation of goals, whether in the health, nutrition or education field, can help foster programmes that will promote the well-being of young children and respond adequately to children's needs (OECD, 2006).

Well-defined educational projects also serve the interests of young children. In infant-toddler settings with a weak pedagogical framework, young children may miss out on stimulating environments that are of high importance in the early years. At the programme level, guidelines for practice in the form of a pedagogical or curriculum framework help staff to clarify their pedagogical aims, keep progression in mind, provide a structure for the child's day, and focus observation on the most important aspects of child development (Siraj-Blatchford, 2004).

Debate remains widespread over the "correct curriculum approach" for the youngest and older children in ECE. This raises important questions about aspects, such as the scope, relevance, focus and age-appropriateness of content; depth and length of descriptions; and input- or outcome-based descriptions. The learning areas that receive most focus in official curricula – particularly in countries where child assessments are used shortly after entry into primary school – are literacy and numeracy. Countries in the social pedagogy tradition do not exclude emergent literacy and numeracy but seek to maintain an open and holistic curriculum until children enter school and, sometimes, well into the early classes of primary school. On the other hand, countries in which early education has been part of, or closely associated with, primary school tend to privilege readiness for school and a more academic approach to curriculum and methodology.

Why does it matter?

Consistency and adaptation to local needs

A common ECE curriculum can have multiple benefits. It can ensure more even quality levels across provisions and age groups, contributing to a more equitable system. It can also guide and support staff; facilitate communication between teachers and parents; and ensure continuity between pre-primary and primary school levels. However, a curriculum can remain unchanged for years and lack the necessary innovation to adapt to ever-changing "knowledge" societies. It can equally limit the freedom and creativity of ECE staff (OECD, 2006).

Because ECE centres are becoming more culturally diverse with children from different backgrounds and home environments, acknowledging that these children might have different needs is important for the effectiveness of a programme. Settings and activities that are designed to accommodate young children's different approaches to learning have been found to reduce disruptive and inattentive behaviour, like fighting with peers and unwillingness to respond to questions or co-operate in class (Philips *et al.*, 2000). The wide range of cultures, communities and settings in which young children grow up makes it essential to engage different stakeholders in developing and refining curricula and to adapt curricula, when needed, to local or cultural circumstances. This is to ensure that curricula actually meet children's needs and truly focus on the child and their development (NAEYC, 2002).

Balancing diverse expectations

It is important that all stakeholders agree on the contents of the pre-primary curriculum. Governments and parents may share common objectives, such as preparing children for school; but they may also disagree on the appropriateness of specific pre-primary subjects for children, such as the integration of ICT in the classroom. In multicultural societies, governments may want to create a skilled and knowledgeable workforce and prioritise shared values for building a sense of community. Meanwhile, some people may be concerned with transmitting specific languages and customs to children while respecting specific beliefs on child rearing. In the context of New Zealand, some of these considerations are given more specific weight and shape by the relationship between the Crown and Māori defined by the Treaty of Waitangi, and the unique status of Māori as *tangata whenua* (indigenous). Curricula can contribute to balancing different expectations of early childhood development in the curriculum and ensure that expectations and needs of different stakeholders are met (Bennett, 2011; Siraj-Blatchford and Woodhead, 2009; Vandenbroeck, 2011).

Provides guidance, purpose and continuity

Curricula can provide clear guidance and purpose through explicit pedagogical guidelines. A focused curriculum with clear goals helps ensure that ECE staff cover critical learning or development areas. It can therefore equip children with the knowledge and skills needed for primary school and further learning and facilitate smooth transitions between education levels (UNESCO, 2004).

Improves quality and reinforces impact

Curriculum can establish higher and more consistent quality across varied ECE provisions; and having a steering curriculum is found to contribute to decreased class repetition, reduced referral to special education and better transitions to primary school (Eurydice,

2009). At the same time, a high-quality curriculum can reduce the fade-out effect of knowledge gained in ECE service (Pianta *et al*., 2009).

Facilitates the involvement of parents

Curriculum can inform parents about what their children are learning in an education or care setting. It can act as a bridge between ECE staff and parents for information sharing and needs-based interventions. Parental knowledge of the curriculum can be particularly important for children with special needs or learning difficulties to provide added support at home. One of the most effective approaches to increasing children's later achievement and adjustment is to support parents in actively engaging with children's learning activities at home (Desforges and Abouchaar, 2003; Harris and Goodall 2006). Activities that can be beneficially promoted include reading to children, singing songs and nursery rhymes, going to the library and playing with numbers.

What aspect matters most?

Thinking beyond curriculum dichotomies

Traditionally, ECE curricula have been categorised into academic and more comprehensive models. An academic approach makes use of a staff-initiated curriculum with cognitive aims for school preparation. A comprehensive approach centres on the child and seeks to broaden the scope for holistic development and well-being (Bertrand, 2007; OECD, 2006). An academic approach can prescribe teaching in critical subject areas but can also limit a child-centred environment characterised by self-initiated activity, creativity and self-determination (Eurydice, 2009; Prentice, 2000). With more flexible aims, a comprehensive approach can better integrate social and emotional well-being, general knowledge and communication skills but risks losing focus of important education goals, as can be seen in Table 1.1 (Pianta, 2010; Bertrand, 2007; UNESCO, 2004).

It is argued that high-quality ECE settings are related to curriculum practice in which cognitive and social development are viewed as complementary and of equal importance. Such integrated curriculum is believed to contribute to high-quality ECE and improved social behaviour (Table 1.2) (Bennett, 2004; Siraj-Blatchford, 2010). As an example, Sweden is considered to have high-quality ECE in part because its curriculum contents place the same value on social and cognitive learning (Sheridan *et al*., 2009, Pramling and Pramling Samuelsson, 2011).

It should be noted that "mixed models" that combine different curriculum approaches are not always successfully integrated in practice. In some countries, the implementation of a mixed model curriculum has been found to be less effective than pure "academic" or "comprehensive" approaches. Nevertheless, a clear dichotomy between the "academic" and "comprehensive" approaches is not necessarily warranted. Instead of focussing on the "type" of curriculum, it may be beneficial to highlight a curriculum's 1) critical learning areas and 2) implementation (Eurydice, 2009).

Table 1.1. Effects of academic and comprehensive curriculum models

Which "model" is most likely to improve a child's...	Academic	Comprehensive
IQ scores	X	
Motivation to learn		X
Literacy and numeracy	X	
Creativity		X
Independence		X
Specific knowledge	X	
Self-confidence		X
General knowledge		X
Initiative		X
Short-term outcomes	X	
Long-term outcomes	X	X

Source: Pianta *et al.*, 2010; Eurydice, 2009; Laevers, 2011; Schweinhart and Weikart, 1997.

Table 1.2. Different curriculum models' effect on school behaviours

	Direct instruction	Child centred (constructivist)	Child centred (social)
Misconduct at age 15	14.9	5.9	8.0
Ever been expelled from high school	16.0%	5.9%	8.0%
Total number of classes failed	9.6	5.0	4.9

Notes: For "Misconduct at age 15", the sum is out of 18 possible criteria of misconduct. For "Ever been expelled from High School", this is the percentage of sample group members that had been expelled from High School. For "Total number of classes failed", this is the number of classes failed by per member of sample group (asked at age 23). Results are from a study of different curriculum models impact on disadvantaged children in New Jersey. The sample groups are randomly selected and have comparable socio-economic backgrounds and other background characteristics. "Child Centred (constructivist)" is a High/Scope curriculum model, "Child Centred (social)" is a Nursery School programme with a focus on social skills. Both curriculum models place stronger weight on child-initiated activities.

Source: Schweinhart and Weikart, 1997.

Critical learning areas

A number of ECE curricula contain goals around specific subject areas for learning. This section notes research around the impact of learning across different subject areas, which may be incorporated into localised curricula or broader curriculum documents.

Literacy

The importance of literacy is well-documented as the means through which all other subject areas are acquired (NIEER, 2006). Researchers continually point to the benefits of literacy for language development and reading outcomes (UNESCO, 2007). Literacy has also been consistently linked to improved school performance and achievement, as well as higher productivity, later in life. Evidence suggests literacy should focus on improving vocabulary and listening skills; building knowledge of the alphabetic code; and introduce printing (NIEER, 2006). The OECD has shown that children whose parents often read to them show markedly higher scores in PISA 2009 than students whose parents read with them infrequently or not at all (OECD, 2011). Research also shows that children quickly establish a stable approach to learning literacy. In order to do so, it is essential that they are exposed to texts, pictures, books, etc. in different communicative contexts. For example, structured play that is

integrated into children's everyday interests can more easily introduce the fundamentals of written language (Mellgren and Gustafsson, 2011).

Numeracy

There is a general consensus that early mathematics should be implemented on a wide scale, especially for disadvantaged children. Even the youngest children use abstract and numerical ideas (amounts, shapes, sizes) in everyday "play" (Björklund, 2008); and staff can use children's existing knowledge and curiosity to develop mathematical concepts, methods and language (Amit and Ginsburg, 2008). In everyday activities, numeracy should focus on "big ideas" to support mathematical competence, namely numbers and operations; shapes and space; measurement and patterns (Amit and Ginsburg, 2008; NIEER, 2009).

Developing early mathematical skills means that the child discerns relations in space, time and quantities and acquires an ability to use his or her understanding in communication with others when solving problems, in logical reasoning and in representation (Björklund, 2008 and 2010). Longitudinal studies on early numeracy show that a child's understanding of numbers and numeric relationships can predict later acquisition of arithmetical skills and mathematical competence (Aunio and Niemivirta, 2010; Aunola *et al.*, 2004).

ICT

Computer-facilitated activities can have positive impacts on play and learning. They can tap into a child's creativity and motivate curiosity, exploration, sharing and problem solving (UNESCO, 2010). ICT can even eliminate boundaries between oral and written language and allow the visualisation of mathematical concepts and relationships (UNESCO, 2010). But while computer use is positively associated with achievement in math, it can be negatively correlated with reading. Some studies demonstrate that more frequent use of computers among low-achieving readers can hinder literacy progress, as computers tend to replace face-to-face instruction, which is critical in literacy development (Judge *et al.*, 2006).

Science

When a child experiences science-related courses early in life, he or she is found to be encouraged to ask questions, think more critically, experiment, develop his/her reasoning skills, read and write. Studies suggest that children become better problem solvers and even experience a raise in their IQ when they are taught principles of logic, hypothesis testing and other methods of reasoning. These dimensions are all tackled in science practices (Bybee and Kennedy, 2005).

Art and music

Arts can boost children's attention, improve cognition and help children learn to envision, *i.e.*, how to think about what they cannot see. The ability to envision can help a child generate a hypothesis in science later in life or imagine past events in history class. Intensive music training can help train children for geometry tasks and map reading. However, there is little attention in research to children's use of art and music practices and its effect on developmental outcomes (Litjens and Taguma, 2010).

Physical and health development

Motor skills, such as crawling, walking and gym classes or play time, are related to children's development of social skills and an understanding of social rules. Health education and hygiene practices are found to have positive effects for children and their parents. Children participating in ECE programmes with specific hygiene and health guidelines have improved hygiene habits, which often result in healthy weight and height in comparison to children who do not benefit from such practices (Litjens and Taguma, 2010).

Play

It is important to integrate exploration, play and peer interaction into the curriculum. Evidence suggests that "social pretend play" and "child-initiated play" lead to better co-operation, self-regulation and interpersonal skills (Bodrova and Leong, 2010; Nicolopoulou, 2010). Child-initiated play has been specifically linked to symbolic representation (Bodrova and Leong, 2010). Researchers point out that the combination of indoor and outdoor play – involving the use of media, role play, drawing and puppets – provides numerous high-quality development opportunities for children to create and negotiate (Aasen *et al.*, 2009).

Choice, self-determination and children's agency

Research shows that children are more competent and creative across a range of cognitive areas when they are given the *choice* to engage in different well-organised and age-appropriate activities (CCL, 2006). A curriculum can stimulate this behaviour through including cross-disciplinary learning activities that trigger children's curiosity, or adopting a framework which primarily encourages cross-disciplinary rather than subject-specific learning areas or goals. Fun and interesting themes, such as "Alive!" (the study of living vs. non-living things), can make learning more personal and relevant for young learners (NIEER, 2007). Implementing such activities in small groups can encourage greater autonomy (Eurydice, 2009; Laevers, 2011) and provides more space for spontaneous or emergent learning (NIEER, 2007). Children's participation is not only important in order to facilitate effective learning of different curriculum elements but can be important in its own right and foster democratic values. When placing value on children's agency, it is considered important that children are allowed freedom of expression and that their modes of communication are recognised in everyday interactions (Bae, 2009).

Children's perspectives

Research on ECE curriculum confirms the importance of children's perspectives not only through their participation in activities – but through their active input in decision making (Broström, 2010; Clark *et al.*, 2003; Sommer *et al.,* 2010). Evidence suggests that consultation with children (only when age-appropriate and possible) can increase their self-esteem and foster social competence (Clark *et al.,* 2003). It can also help ECE staff and management reflect on their own practice and aspects, such as the design of indoor and outdoor spaces (Pramling Samuelsson and Asplund Carlsson, 2008).

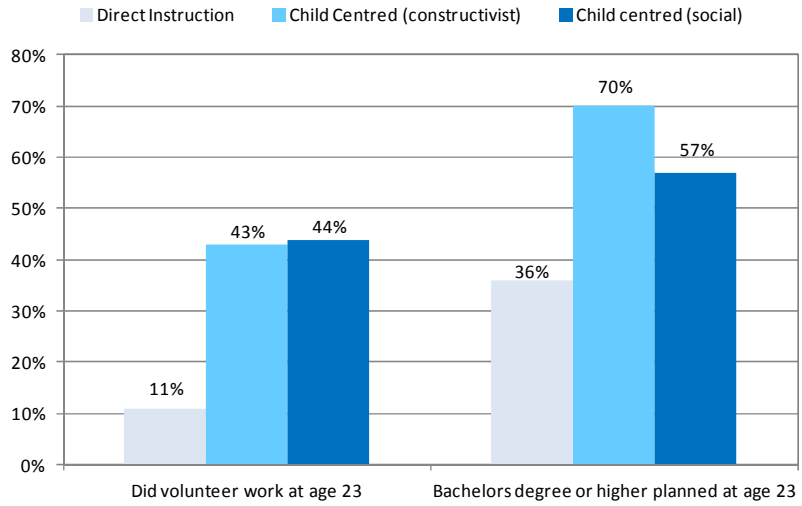
Child-initiated learning

Children learn best when they are active and engaged; when interactions are frequent and meaningful; and when curriculum builds on prior learning (Kagan and Kauerz, 2006; NIEER, 2007). The ability of staff to create a chain of learning events over time with clear direction and concrete activities is also important for consistent development, especially in academic topics (Doverborg and Pramling Samuelsson, 2011).

Evidence suggests that a curriculum with a high level of child-initiated activities can have long-term benefits, including an increased level of community service and motivation to pursue higher education (Figure 1.1).

Figure 1.1. Impact of different curriculum models

On community involvement and motivation to pursue further studies



Notes: Results are from a study of different curriculum models' impact on disadvantaged children in New Jersey. The sample groups are randomly selected and have comparable socio-economic and other background characteristics. "Child centred (constructivist)" is a High/Scope curriculum model, "Child centred (social)" is a Nursery School programme with a focus on social skills. Both curriculum models place stronger weight on child-initiated activities.

Source: Schweinhart and Weikart, 1997.

Teacher-initiated learning

Research demonstrates that teacher-initiated learning (common in the academic approach) can reduce early knowledge gaps in literacy, language and numeracy. Numerous studies have concluded that high-quality academic programmes involving explicit teaching can have positive short-term effects on IQ scores, literacy and math (Pianta *et al*., 2009) (Table 1.1). These skills have been found to be strong predictors of subsequent achievement (Brooks-Gunn *et al*., 2007). However, as pointed out above, child-initiated learning can have long-term benefits and is highly important for children's future social development. In order to maximise learning, development and social outcomes, it is suggested that ECE curricula should combine child-initiated with teacher-initiated contents and activities (Sheridan, 2011; Sheridan *et al*., 2009).

What are the policy implications?

Adapting curricula to local circumstances

A greater extent of local adaptation of curricula can reinforce the relevance of ECE services. This can be especially important when "national" values or ideas on early childhood development are not shared by all (Eurydice, 2009). Co-constructed responses developed in partnership with teachers, parents, children and communities can greatly enhance the local appropriateness of curriculum aims and objectives (OECD, 2001).

Designing curriculum based on cognitive and neurological science

Cognitive developmental science and neurological research indicate that children learn certain things at particular ages, in a certain sequence. The "peaks" of brain sensitivity may vary across functions/skills as follows (Figure 1.2) (Council Early Child Development, 2010).

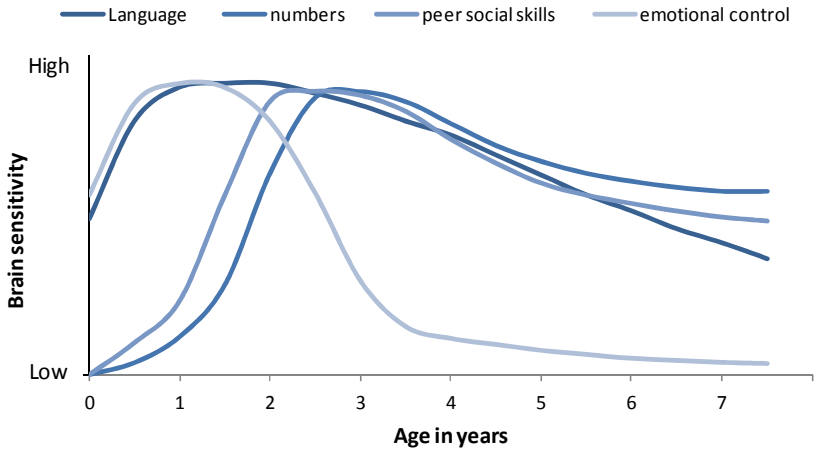
Emotional control and peer social skills

The brain sensitivity to development of emotional control starts from the middle level, increases to the high level from birth to around age one, and declines to the low level where it stays from age four. Peer social skills start with the low level, increase rapidly from ages one to two, gradually decrease and remain at a medium level from age four.

Language and numbers

Language development starts at the middle level, increases to the high level at around ages one to two, slightly decreases towards age four, and will continue to decrease towards the middle and low levels from then on. Numeracy starts with the low level, increases rapidly from ages one to three, gradually decreases but will be maintained at the high level from age four.

Figure 1.2. Sensitive periods in early brain development



Source: Council for Early Child Development (2010).

Recognising the "virtues" of complimentary curriculum models

In practice, comprehensive programmes are thought to better facilitate a child-centred environment where learning builds on existing knowledge from children's perspectives. Children's priorities can be identified in a number of ways, for instance, children can be engaged in taking photographs of the most important "things" in the classroom. Experiments like these have been able to identify the importance of friends, staff, food and outside play. Other information-gathering tools, such as interviews, questionnaires and role-play, reveal that children like to finish their activities and appreciate support for periods of transition between activities (Clark *et al*., 2003). Children can benefit from teacher-led interaction and formal instruction (Eurydice, 2009). However, play-based, as opposed to "drill-and-practice", curricula designed with the developmental needs of children in mind can be more effective in fostering the development of academic and attention skills in ways that are engaging and fun (Brooks-Gunn, 2007).

Considering national characteristics and ECE structural factors

National characteristics and ECE structural factors provide insight into the appropriateness of curriculum models. Where staff have little certification and training and ECE provisions are fragmented, staff may benefit from added guidance and a more concrete curriculum. In countries encouraging child-centred activities and giving space to staff to create local innovations and adaptations, a child-centred model requires practitioners to be adequately

qualified and trained to balance wide-ranging (and more abstract) child development areas. Thus, the chosen curriculum must be coupled with adequate staff training, favourable working conditions and appropriate classroom materials (OECD, 2001; 2006).

Ensuring sufficient and appropriate staff training

To enhance children's learning and development, (additional) staff training is needed on curriculum in general, but also on specific areas in which staff might need additional training support, such as multicultural classroom management and adaptation of curriculum contents to diverse linguistic and cultural groups. Furthermore, in a rapidly changing society, knowledge on the use of ICT is becoming more relevant, which can also facilitate early development, especially in reading (Judge *et al*., 2006).

Ensuring that curriculum or standards are well-aligned for children aged zero to six and beyond

It is not only important that curriculum standards are present in ECE environments but that they are well-aligned from ages zero to six, or even beyond: an aligned vision of ECE contents can ensure more holistic and continuous child development.

What is still unknown?

Comparative advantage of different curriculum models

Table 1.1 compares the specific outcomes of "academic" and "comprehensive" curriculum models based on a selection of research findings. It remains unclear which of the two approaches produces the largest long-term benefits on health, college attendance, future earnings, etc. Geographical and political positioning has likely influenced the existing research: American researchers are more likely to support an academic ECE approach, whereas the trend in Europe points to the importance of non-cognitive learning areas. More research is therefore needed to clarify the mixed research findings across different country-specific ECE contexts.

Pedagogical strategies to support "play"

Most researchers agree that children's "play" is important for cognitive, social and emotional development. It has been traditionally integrated into subject-based learning, improving literacy, math and science outcomes. However, there is little differentiation between types of "play" (*e.g.*, social, pretend, object) that serve different developmental purposes. A lack of evidence leads many to unfairly separate play ("child-initiated games with no purpose") from curriculum ("teacher-initiated practices with useful benefits") (Bodrova and Leong, 2010).

Non-Western curriculum models and their effects

There is considerable literature on "academic" and "child-centred" curriculum models as seen in North America and Europe. But a Western child-centred curriculum focused on individual benefits can actually contradict other value systems, including those who privilege group interests (Kwon, 2004). Thus, there is a need to research and diffuse alternative national curriculum models that are locally adapted and implemented.

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CHAPTER 2

WHERE DOES NEW ZEALAND STAND COMPARED TO OTHER COUNTRIES?

New Zealand's Te Whāriki *is a progressive and cogent document regarding the orientation and aims of ECE. The document clearly lays out what is expected of staff and child development with useful examples. The curriculum provides continuous child development through the use of one national framework for ECE; puts the community at the centre of the curriculum; strongly focuses on well-being and learning; ensures age-appropriate content; emphasises the importance of tolerance and respect for cultural values and diversity; and is well aligned with primary schooling.*

Capitalising upon its strengths, New Zealand could further enhance quality through its curriculum. Other country practices would suggest such options as: 1) strengthening parental involvement in curriculum design or implementation; 2) reflecting on children's agency and child-initiated play; and 3) further improving the communication and leadership skills of staff for effective implementation.

New Zealand's *Te Whāriki* is overall a cogent document that addresses key aspects of child development and care. The document clearly lays out what is expected from staff and child development with useful examples. The challenges the country is facing are mostly related to implementation of the document and reflection upon parental or community engagement.

Strengths

Continuous holistic child development approach throughout the ECE period

Many OECD countries still adopt a "split" system where child care and early education are governed by different ministries and the majority of jurisdictions. Many of these countries have created a learning framework for children in the older age bracket of ECE only: from around age two-and-a-half or three to compulsory schooling.

New Zealand is one of the countries that have advanced in integrating early childhood education and care under one lead ministry with an aim to provide holistic child development. These countries have created a curriculum framework covering birth to compulsory education (Figure 2.1).

The school starting age may differ. Among reference countries, in Sweden and Manitoba (Canada), children start compulsory primary schooling at age seven; in New Zealand and British Columbia (Canada), six; and in Scotland (United Kingdom), five.

In comparison with the reference countries:

- British Columbia (Canada): The jurisdiction has a split system where responsibility for ECE is shared between the Ministry of Education and the Ministry of Children and Family Development. British Columbia has one learning framework for children aged zero to five and a separate curriculum for children in full day kindergarten at age five. Both place an emphasis on the "whole child", thus seeking a holistic approach across the two curricula.
- Manitoba (Canada): The jurisdiction divides ECE responsibilities under different cabinets and departments. Manitoba has an *Early Returns* curriculum in place covering children aged one to seven as well as a kindergarten curriculum covering only ages five and six. *Early Returns* places a great emphasis on staff practices, while the kindergarten curriculum is aligned with the curriculum for children up until grade eight and specifies the skills children should develop as well as the kinds of subjects that should be taught. All practices and skills are adapted to children's development process, providing different examples for different grades.
- Sweden: The country has an integrated ECE system in place. Like most countries aiming to deliver "integrated" services, New Zealand and Sweden have frameworks that cover the entire ECE age range (from zero or one to compulsory schooling age).
- Scotland (United Kingdom): Although it has an integrated ECE system, it has two different curriculum frameworks in place. There are staff guidelines for professionals working with the youngest children (pre-birth until age three), and there is an integrated curriculum covering ECE until upper secondary education. The latter document is called the *Curriculum for Excellence*, which covers children in early education from age three up until age 18. The documents include age-appropriate sections based on the age and development process of the child. Few countries or jurisdictions cover other levels of education (beyond ECE) in their curriculum framework as Scotland does.

Figure 2.1. Coverage of ECEC curriculum frameworks or guidelines by age group

	Standards/curriculum for Care
	Standards/curriculum for Education and/or Education and Care
	No standard curriculum is in place for the specified age group
	Compulsory schooling

Age	0	1	2	3	4	5	6	7
Australia	Belonging, Being, Becoming - Early Years Learning Framework for Australia							
Austria								
Belgium (Flemish Comm.)			2.5y Ontwikkelingsdoelen					
Belgium (French Comm.)			2.5y					
Canada (British Columbia)	British Columbia Early Learning Framework for 0-5 year olds					British Columbia Early Learning Framework for 5-6 year olds		
Canada (Manitoba)			Early Returns Curriculum					
						Manitoba Kindergarten Curriculum		
Canada (Prince Edward Island)	Early Learning Framework							
Czech Republic				Framework Educational Programme for Pre-school Education				
Denmark	Preschool curriculum Læreplaner							
Estonia		1.5y Framework Curriculum of Preschool Education						
Finland	National curriculum guidelines on early childhood education						Core Curriculum for Pre-primary education	
France			2.5y National curriculum for école maternelle					
Germany (Baden-Württemberg)	Orientierungsplan für Bildung und Erziehung für die baden-württembergischen Kindergärten							up to 10
Germany (Bavaria)	Bildung, Erziehung und Betreuung von Kindern in den ersten drei Lebensjahren			Der Bayerische Bildungs- und Erziehungsplan für Kinder in Tageseinrichtungen bis zur Einschulung				
Germany (Berlin)	Berliner Bildungsprogramm für die Bildung, Erziehung und Betreuung von kindern in Tageseinrichtungen bis zu ihrem Schuleintritt							
Germany (Brandenburg)	Grundsätze der Förderung elementarer Bildung in Einrichtungen der Kindertagesbetreuung in Brandenburg							
Germany (Bremen)	Rahmenplan für Bildung und Erziehung im Elementarbereich							
Germany (Hamburg)	Hamburger Bildungsempfehlungen für die Bildung und Erziehung von Kindern in Tageseinrichtungen							up to 15
Germany (Hesse)	Bildungs- und Erziehungsplans für Kinder von 0 bis 10 Jahren in Hessen							up to 10
Germany (Mecklenburg-Western Pomerania)	Bildungskonzeption für 0- bis 10-jährige Kinder in Mecklenburg-Vorpommern							up to 10
Germany (Lower Saxony)	Orientierungsplan für Bildung und Erziehung im Elementarbereich niedersächsischer Tageseinrichtungen für Kinder							
Germany (North Rhine-Westphalia)	Mehr Chancen durch Bildung von Anfang an - Grundsätze zur Bildungsförderung für Kinder von 0 bis 10 Jahren in Kindertageseinrichtungen und Schulen im Primarbereich in Nordrhein-Westfalen							up to 10
Germany (Rhineland-Palatinate)	Bildungs- und Erziehungsempfehlungen für Kindertagesstätten in Rheinland-Pfalz							up to 15
Germany (Saarland)	Bildungsprogramm für saarländische Kindergärten							
Germany (Saxony)	Sächsischer Bildungsplan - ein Leitfaden für pädagogische Fachkräfte in Krippen, Kindergärten und Horten sowie für Kinderttagespflege							up to 10
Germany (Saxony-Anhalt)	Bildungsprogramm für Kindertageseinrichtungen in Sachsen-Anhalt							
Germany (Schleswig-Holstein)	Erfolgreich starten: Leitlinien zum Bildungsauftrag in Kindertageseinrichtungen							up to 15
Germany (Thuringia)	Thüringer Bildingsplan für Kinder bis 10 Jahre							up to 10

Figure 2.1. Coverage of ECEC curriculum frameworks or guidelines by age group (continued)

Age	0	1	2	3	4	5	6	7
Hungary				National Core Programme of Kindergarten				
Ireland	Early Childhood Curriculum Framework: Aistear							
Israel				Framework Programme for preschool				
Italy	3 months			Guidelines for the curriculum				
Japan				Course of Study for Kindergarten				
	National curriculum of day care centers							
Korea				National curriculum for kindergarten		Nuri Curriculum		
	Standardized childcare curriculum							
Luxembourg				Le plan d'études				
Mexico	Childcare curriculum			Early childhood education curriculum				
Netherlands			2.5y	Development goals/competences				
New Zealand	Te Whāriki							
Norway	Framework Plan for the Content and Tasks of Kindergartens							
Poland				Core Curriculum for Preschool Education				
Portugal				The Curriculum Guidelines for Pre-School Education				
Slovak Republic				The National Education Programme				
Slovenia		National Curriculum for Pre-school Institutions						
Spain	Early Childhood Curriculum							
Sweden		Läroplan för förskolan Lpfö 98					Läroplan för grundskolan, förskoleklassen och fritidshemmet Lgr 11	
Turkey				Pre-school education programme				
United Kingdom (England)	Statutory Framework for the Eary Years Foundation Stage							
United Kingdom (Scotland)	Pre-birth to three - staff guidelines			Curriculum for Excellence		up to 18		
United States (Georgia)			Georgia's Pre-K Content Standards					
United States (Massachusetts)				Guidelines for Preschool Learning Experiences				
United States (North Carolina)				Early Learning Standards for North Carolina Preschoolers and Strategies to Guide Their				
United States (Oklahoma)				Priority Academic Student Skills				

Notes: For Poland, the compulsory school age was lowered from age seven to six in 2009 with a transition period of three years (until 2012), during which time, parents can choose if their child starts school at age six or seven. For Sweden, *Läroplan för förskolan* is the curriculum for the preschool; *Läroplan för grundskolan, förskoleklassen och fritidshemmet* regards the curriculum for the preschool class, compulsory school and out -of -school centres.

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal", June 2011.

Balanced approach to child development, focus on both child well-being and learning

There is a wide consensus on the importance of academic skills, such as literacy and numeracy, for children in ECE: all respondents to the OECD survey, including British Columbia, Manitoba, New Zealand, Scotland and Sweden, include these two items in their curriculum or framework (Figure 2.2). The content of New Zealand's framework includes subjects referring to academic-based learning areas and the development of "soft skills" in which learning areas are taught while developing socio-emotional skills. *Te Whāriki* provides guidance for ECE staff on subject learning areas, *e.g.*, literacy, but through the lens of focussing on a broader competency or "strand", as it is named in the framework, such as communication. *Te Whāriki* addresses the values and expectations society holds with a strand dedicated to belonging and states that children should be comfortable with the

routines, customs and regular events in their environment. *Te Whāriki* can be seen to address culture and customs in a way that seeks to embrace the diversity of its population and cultures. The environment and cultural values play a large role in *Te Whāriki* (Table 2.1).

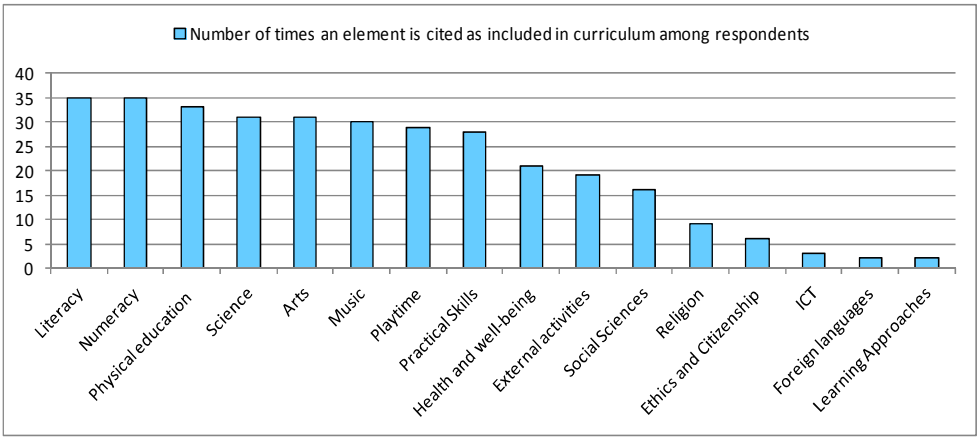
British Columbia (Canada) divided its framework into areas of development based on children's characteristics. These development areas are much more focused on the plasticity and development of a child's brain and less on contribution to society and belonging, as New Zealand's development strands. The development areas in British Columbia's Kindergarten Programme Guide include: aesthetic and artistic development; emotional and social development; intellectual development; physical development and well-being; and development of social responsibility. British Columbia's framework also has a strong emphasis on well-being and belonging. The document states that a sense of well-being and belonging is vital to children as they learn about and explore the world around them.

Sweden's framework is much more based on traditions of social pedagogy. Its curriculum is developed around societal norms and values, and the expected goals refer to these. Development areas in Sweden relate to characteristics and avoid specific outcomes regarding cognitive knowledge. Examples of goals include to "develop curiosity and enjoyment" and "develop children's ability to listen, reflect and express their own views". Within these goals, developing an understanding of learning areas is included, such as to "develop the ability to use mathematics to investigate and reflect over problems".

Scotland's *Curriculum for Excellence* and Manitoba's curriculum explicitly prescribe curriculum areas, such as literacy and languages and mathematics. Within each area, a practical framework for staff has been structured explaining what this area contains. Manitoba developed separate support documents for certain curriculum areas to support staff in implementation of the subject and enhance child development. These documents provide extensive information on the subject and give example learning experiences for staff but also guide staff on assessment practices.

Manitoba addresses areas of soft skills through including "psychology" in their curriculum for Kindergarten, while British Columbia does so by having a partial focus on emotional and social development as well as physical development and the development of social responsibility. In accordance with New Zealand, British Columbia's Full Day Kindergarten Guide puts great importance in learning through community.

Figure 2.2. Content areas included in ECEC curriculum[1]



Note: Respondents may list more than one element. See Annex for definitions and methodology for data collection.

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal", June 2011.

Table 2.1. Summary of major ECEC curriculum programmes/approaches/traditions

Name of programme/approach	Background theory or theorist	Main features
Didactic Curriculum/ Direct Instruction Curriculum	B.F. Skinner	Classic method of learning with mainly teacher-initiated activities which includes frequent repetition.
Socialisation Curriculum	Johann H. Pestalozzi and Friedrich Froebel	Views learning as an input by the environment. The main goal is socialisation, and the approach relies on unstructured play since it is believed that children must direct their own learning and will learn if developmentally ready.
Constructivist Curriculum/ Interactive Curriculum	Jean Piaget and Lev Vygotsky	Views learning as an active exchange between child and environment that progresses in 'stages', with a crucial role for adults and peers as stimulus in learning.
Developmentally Appropriate Practices (DAP)	National Association for the Education of Young Children (NAEYC)	A balance of child-initiated learning and guidance from staff members. The approach provides a wide range of different activities which are carried out in groups, or independently. It focuses on socio-emotional, physical and cognitive development. All practices are based on i) theories of child development; ii) individual needs; and iii) the child's cultural background
Readiness for School Approach	Jean Piaget, etc.	Emphasis on monitoring and/or assessing children's development with the goal to prepare children (knowledge-wise and/or socio-emotionally) for formal education - ensuring that children will not start school with development arrears.
Outcomes-Based Education/ Performance-Based Education	William Spady, etc.	A child-centred learning philosophy that focuses on empirically measuring student performance (outcomes) and puts an emphasis on setting clear standards for observable, measurable outcomes.
Te Whāriki (New Zealand)	Helen May and Margaret Carr	*Te Whāriki* adopts a specific socio-cultural perspective on learning that acknowledges the different cultural and social contexts in New Zealand and a social and interactive way of learning is highly important. The curriculum is built around five 'pillars' of child development for which developmental, cultural, and learning goals are formulated.
Nordic Curriculum tradition	Social pedagogy	Prevalent among Nordic countries, the core of the curriculum is the dialogue between adult and child and creative activities, discussions and reflections. The curriculum sets goals for early education, but is flexible so that it can be adapted to local and individual needs.
Experiential Education (EXE)	Ferre Laevers	The degree of emotional well-being and the level of involvement are crucial for EXE. It emphasises concentration, intrinsic motivation and working in groups and stimulating children in their practices and thinking, and to give them autonomy.
High Scope Curriculum	David Weikart, etc. drawing on child development theories (Piaget, Vygotsky), progressive educational philosophy (Dewey), cognitive-developmental psychology (Clements, Gelman, Brenneman) and brain research	The core idea is that children learn better by active experiences that express their interests. When children make their own choices for practices and activities, they 'naturally' engage in different interest areas and experiences that are keys to development. Routine is important in this, and children's development is observed and reported on daily.
Reggio Emilia Programme	Loris Malaguzzi	The programme aims to develop learning competencies through creative communication and dialogue, so that children will develop thinking capacity and construct their own theories and understandings, while content knowledge is considered secondary to learning: there are no planned goals or standards indicating what should be learned.
Montessori Programme	Maria Montessori	Programme is organised into five basic categories: practical life, sensorial, math, language and culture – and is based on the child's own natural inner guidance and interest in learning. The educator's involvement is reduced to the least amount possible.
Waldorf Steiner Education	Rudolf Steiner	The approach emphasises the role of the imagination in learning, developing thinking that includes a creative as well as an analytic component. The education emphasises learning through practical activities and materials are kept simple to employ and strengthen their imagination and creativity.

Source: OECD (2001), *Starting Strong*; OECD (2006), *Starting Strong II*; OECD (2010), EDPC/ECEC/RD(2010)6; OECD (2010), EDPC/ECEC(2010)3/REV1; public websites.

"Arts" and "music" are other common subjects included in curriculum frameworks. All jurisdictions (British Columbia, Manitoba, New Zealand, Scotland and Sweden) include both curriculum areas. Each also addresses practical skills in its framework, although not always as a separate subject in itself but integrated in or interwoven with other subjects, such as well-being and health. New Zealand addresses the development of practical skills within each of its five strands through stimulating the development of social and co-operative skills, physical skills and/or work and study skills.

Manitoba integrated the development of practical and social skills into its "physical/health education" curriculum subject, such as recognising when weather is safe or dangerous to play outside, shoe-lacing, how to dress well for weather conditions, how to interact with peers and the risks of overuse of video-gaming. For each of the five areas included in "physical/health education" (movement, fitness management, safety, personal/social management and healthy lifestyle practices), learning skills are explained with example practices for staff. Scotland's *Curriculum for Excellence* also merges the development of practical skills with "health and well-being", although there is less explicit attention to practical skills in the curriculum.

While several countries allocate time specific to "play" in their curriculum, some indicate that play is embedded into other content areas in order to stimulate learning (Figure 2.2). New Zealand's *Te Whāriki* gives the opportunity for open-ended exploration and play as a way to integrate children's learning and development. Where *Te Whāriki* addresses play as an effective learning strategy, Sweden and Manitoba emphasise how play facilitates activities on children's own terms. British Columbia, Manitoba, New Zealand and Sweden include "playtime" as a separate curriculum element but emphasise that play is integral to learning and development. The latter is also emphasised in Scotland's *Curriculum for Excellence*, as well as in the pre-birth to three guidelines, which state that although play is not a subject in the curriculum itself, child-initiated learning should be stimulated through play.

Scotland is unique in prescribing religion and ethics as learning areas for children. British Columbia, Manitoba, New Zealand and Sweden do not prescribe "religion" or "ethics and citizenship" as a specific subject areas in their curricula.

Regarding other subjects: curriculum content relating to natural sciences is included by all countries and jurisdictions (New Zealand and its reference countries). Unlike Sweden, all other jurisdictions include "social sciences" in their curricula. Manitoba and British Columbia place great emphasis on health and well-being; New Zealand as well, not by emphasising actual learning outcomes, but by focusing on developmental outcomes where the greater overall development of children matters more than actual knowledge gain.

Inclusion of ICT – an emerging topic of relevance

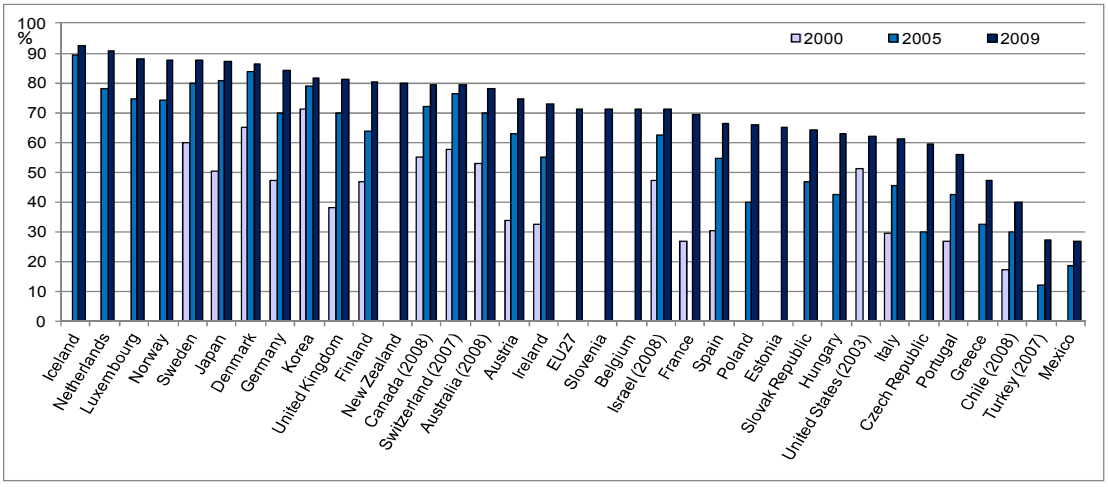
Computers and ICT (information and communication technology) have profound potential to impact how people live, learn and work. If used wisely, ICT can foster many benefits, including helping children visualise abstract issues or learn how to read. It also fosters children's technological skills. ICT is becoming an increasing emerging topic, as more households own computers and children are expected to have a certain level of computer literacy when entering the labour market.

ICT has developed rapidly over the past 40 years and is now a part of our everyday lives. Access to computers at home grew rapidly in OECD countries between 2000 and 2009, although discrepancies can be observed across different countries (Figure 2.3). In Sweden, the availability of home computers in households is high (close to 90%). In Canada and New Zealand, a large majority of households (around 80%) have access to a computer at home.

Among its reference jurisdictions, New Zealand is unique in including ICT as a prescribed learning area. New Zealand addresses ICT through "technology" in their curriculum, while none of the frameworks of comparison countries do: Scotland and Manitoba's Kindergarten Curriculum include development of ICT knowledge and skills, although these are only included for primary or secondary education. In Sweden and British Columbia, this is not a topic prescribed in the national curriculum framework – although individual ECE centres might include it in their own curriculum plan, or computers can be used to teach children specific curriculum learning areas.

Figure 2.3. The use of ICT

Households with access to computer at home as percentage of all households



Notes: Generally, data from the EU Community Survey on household use of ICT, which covers EU countries plus Iceland, Norway and Turkey, relate to the first quarter of the reference year. For the Czech Republic, data relate to the fourth quarter of the reference year. *Statlink*: http://dx.doi.org/10.1787/888932321530.

Source: OECD, ICT database and Eurostat, Community Survey on ICT usage in households and by individuals, July 2010.

Mapping or identifying children's needs, development and learning

Curriculum descriptions can, in general, be categorised into "input"- or "outcome"-based approaches. Among OECD countries, very fewer countries specify "child outcomes" and "input from the centres", while most curriculum frameworks include "input from staff", *i.e.*, specific requirements as to what is expected of ECE staff (Figure 2.4). While Anglo-Saxon countries, including New Zealand, favour the outcome-based approach, Nordic countries tend to avoid using the term "child outcomes".

The responsibility for meeting the outcomes should not be placed on children's shoulders but on the shoulders of those who provide opportunities and support for learning (NAEYC, 2002). When responsibility to meet the outcomes is placed on children instead of the staff, negative consequences potentially face children who fail to meet the outcomes because the data may be used to label children as educational failures, retain them for a year or deny them educational services (Hatch, 2002).

Research indicates it is more useful to focus on how children learn and develop, rather than on what outcomes they should meet (Hyson, 2008). When focusing more on how children should learn or develop and therefore placing emphasis on the important support role of staff in children's development, preschoolers are found to be more flexible in problem solving tasks and have higher academic achievement in first grade (George and Greenfield, 2005). A number of studies have found that curricula fostering choice, independence, age-appropriate levels of challenge and activities are associated with greater motivation and

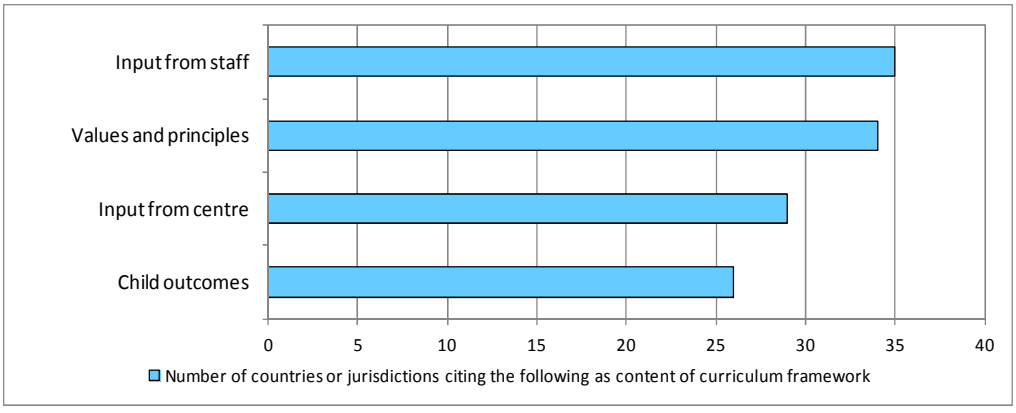
engagement. Children who are more engaged in the classroom are found to perform better in elementary school (Hyson, 2008; Rimm-Kaufman *et al.*, 2005). Strongly didactic curricula have been associated with less interest and lower motivation to learn (Stipek *et al.*, 1995). However, when standards are to be developed and implemented, they will be more successful when families are included in this process since parents play a critically important role in early development (NAEYC, 2002). Additionally, effective outcomes or learning standards always require a well-developed curriculum, age-appropriate practices and professional development strategies from staff that connect with children's interest and abilities and that promote positive development and learning, as it is the staff and its pedagogy which define children's experiences (NAEYC, 2002).

British Columbia's Kindergarten Programme, New Zealand and Scotland's *Curriculum for Excellence* specify expected child outcomes in addition to input from service providers and staff. New Zealand focuses herein largely on developmental process outcomes and little on actual child outcomes in terms of what precisely a child should know at a certain age. The *Te Whāriki* framework cautions, however, that all children learn and develop differently and that expectations to what children learn, and at what time, need to be flexible. Scotland, on the contrary, focuses on what the child should know and be able to do.

Sweden's curriculum, Manitoba's *Early Returns* curriculum, and British Columbia's *Early Learning Framework* for zero-to-five-year-olds have a strong focus on the input: the values and principles that guide the curriculum and practice, expected inputs from staff, tasks or activities to be carried out by staff, and learning areas to address.

By identifying specific child outcomes or developmental goals, staff can be supported in identifying children's needs and mapping children's development and learning processes. In addition to child developmental outcomes or goals, New Zealand and British Columbia's frameworks include questions for reflection for ECE professionals, which can guide them in improving their own practices and strengthening their skills as well as stimulating the development of children. Sweden places the emphasis of successful child development on staff performance and uses documentation tools to follow child development. This requires strong staff competences and skills in order to identify children's needs without any form of assessment and a clear indication of what is expected of staff. It requires continuous, or at least regular, staff monitoring to ensure effective curriculum implementation. These requirements are costly, as staff education and in-service training are expensive.

Figure 2.4. Approaches of ECEC curriculum[2]



Note: Respondents may list more than one content category.

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal", June 2011.

Age-appropriate approach

Age-appropriateness and needs-based pedagogy are highly valued aspects of New Zealand's early childhood curriculum, British Columbia and Manitoba's frameworks, Scotland's *Curriculum for Excellence* and Sweden's curriculum: activities ought to be adapted and suitable to children's level of function, current knowledge and understanding. Instruction aims at taking into account the age of children as well as children's cultural, religious, linguistic, socio-economic and ideological background. The starting point for all of these countries is the experience children have already gained, their interests and motivation and their ambition to acquire knowledge.

New Zealand, British Columbia [3], Manitoba [4] and Scotland include explicit outcomes, guidance and experiences for different age groups. The Swedish curricula delegate this task to ECE centres to a further extent, giving providers large flexibility in adapting the framework to the needs of different age groups.

New Zealand, British Columbia and Scotland specifically prescribe different activities for and expectations of children according to age group. Giving specific examples adapted for different age groups, as is done in British Columbia's *Early Learning Framework* and New Zealand's *Te Whāriki*, supports staff in adapting activities and learning to different age groups.

Alignment with primary schooling

In *Te Whāriki*, there are explicit links to the primary school curriculum and learning areas for each development strand (or area). These links clearly describe what children are expected to do in primary school, how this relates to the experiences in ECE and what activities staff can implement to facilitate this transition. This smoothes the transition from one early education provision to another.

Sweden encourages ECE centres to co-operate with primary schools to smoothen the transition from kindergarten to school, although Sweden's curriculum content is not explicitly linked to the school curriculum. British Columbia's Programme Guide for Kindergartens states that strong relationships between kindergarten, school and families are important in aiding a smooth transition. British Columbia's framework spends an entire section on co-operation with other levels of education and families, which guides ECE staff and parents in how to stimulate an easy transition.

New Zealand aligns its five development strands well with essential skills and experiences in primary schooling. Scotland's *Curriculum for Excellence* has a stronger link with primary schooling though, since the curriculum covers children from age three up until age 18 and aligns all curriculum subjects over this age range.

Inclusion of cultural diversity

In almost all OECD countries, the number of foreign-born residents has increased between 1990 and 2010 (Figure 2.5, Panel A). The size and composition of the immigrant population, as well as the impetus of the increase, vary across countries.

Canada and New Zealand are considered "traditional settlement" countries where about 10-20% of the population has an immigrant background. In New Zealand, the percentage of the population with an immigrant background increased from 15.5% in 1990 to 21.3% in 2010. This is quite similar to Canada where the increase was from 16.2% to 21.3%. Sweden is considered a "European state with post-war labour recruitment" of which some have large

immigrant populations. The United Kingdom's immigrant population has gradually increased to a little over 10% in 2010. An increasing share of immigrants in a country can bring along certain challenges in learning and inclusion.

Language learning

OECD PISA studies found that there are large and significant differences in reading performances between 15-year-old native students and first-generation and second-generation immigrant students in many OECD countries (Figure 2.5, Panel B). Especially minority and immigrant groups with linguistic backgrounds different from the native language might experience difficulties in language and reading development.

New Zealand and its reference countries include "literacy" (including language learning) as an important element of their ECE curriculum. Learning and acquisition of the local language can be an important aspect of stimulating socio-cultural integration. New Zealand builds its framework primarily on a bicultural basis (Māori and NZ European) and emphasises the importance not only of children experiencing bicultural learning, but also having their own home and family culture affirmed in the learning environment. To emphasise the importance of the bicultural foundation of *Te Whāriki*, the curriculum is developed in both English and te reo Māori (the Māori language).

Other countries also underline the importance of native language skills. According to the Swedish and Canadian frameworks, multilingual children should be encouraged not only in the country's national language skills, but also in using their native language.

Respect for cultural values and social integration

The internationalisation of societies imposes high demands on the ability of people to live with and understand values inherent in cultural diversity. Early childhood education services are important social and cultural meeting places that can reinforce this and prepare children for life in an increasingly internationalised community. Awareness of cultural heritage and learning about the culture of others can contribute to children's ability to understand and empathise with the circumstances and values of others.

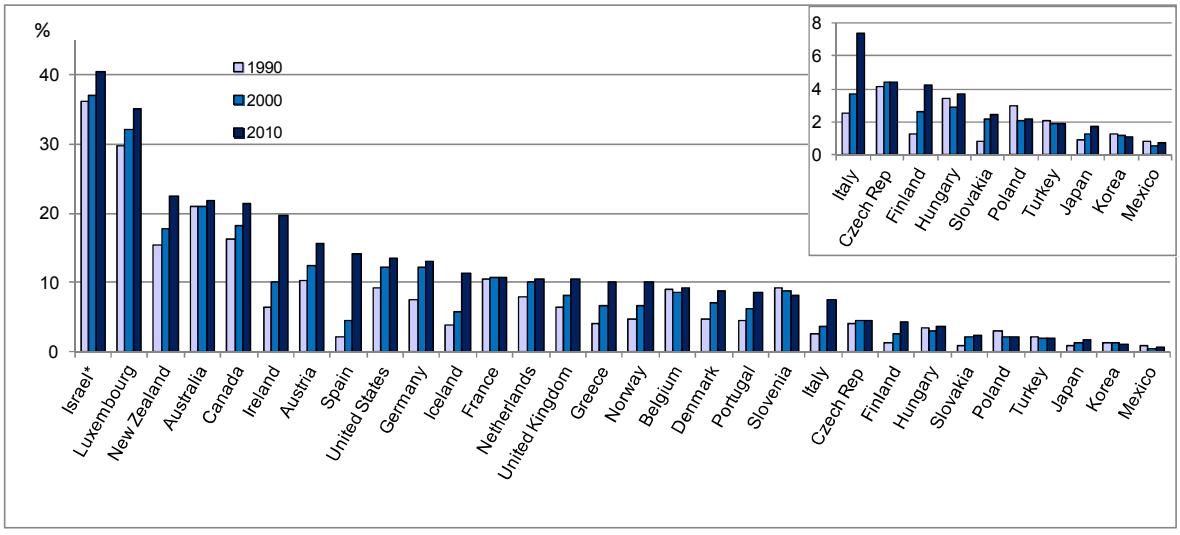
Other than immigrant minority groups, communities like Pasifika and Māori in New Zealand, aboriginal groups in Manitoba and British Columbia, and the Sámi in Sweden, also contribute to linguistic and cultural diversity within countries. The frameworks of these jurisdictions emphasise the importance of recognising different cultural backgrounds and languages. New Zealand's curriculum does this very well.

The framework in New Zealand is developed around the ideas of "community" and "biculturalism". New Zealand centres its ECE curriculum on the recognition of different social and cultural contexts, addressing the cultural and linguistic diversity of the country's population in which Māori children have the possibility to be educated in their native Māori language. In comparison, Sweden recognises the importance of Sámi language and culture together with other immigrant minorities; and in British Columbia and Manitoba, ECE providers are encouraged to consult aboriginal community leaders and meet the needs of aboriginal children through co-operative and collaborative partnerships. All three jurisdictions recognise the importance of different cultures and identities and emphasise that the minority culture should be addressed in all ECE services. However, British Columbia, Manitoba and Sweden's frameworks do not integrate different national cultures to the extent that *Te Whāriki* does – which is based upon multi-culturalism, social and cultural integration, belonging to community and respect for others.

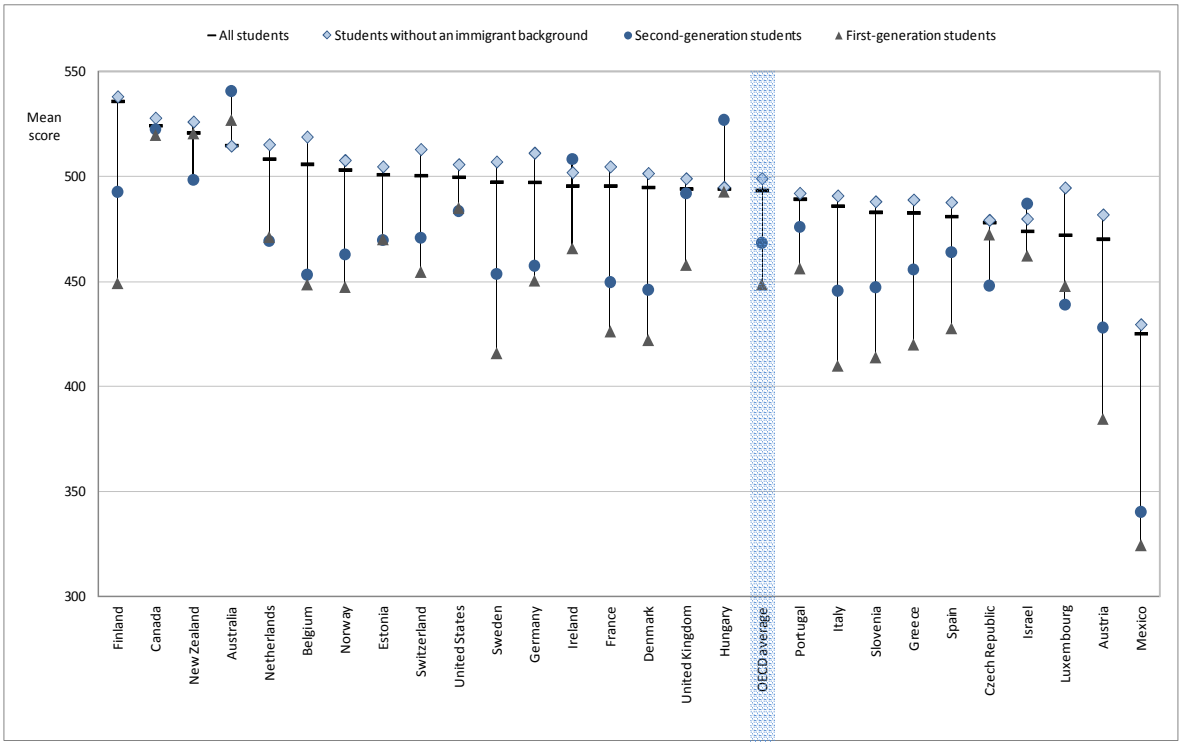
Although countries are becoming increasingly multi-cultural with possible issues related to integration or "a feeling of belonging", none of these jurisdictions include "learning foreign languages" or "ethics and citizenship" as prescribed elements in their frameworks. Belonging, however, is a topic that receives great attention in New Zealand's curriculum and, to a lesser extent, the frameworks of British Columbia.

Figure 2.5. Immigrant population

Panel A. Trends of international migrants, as a percentage of the total population



Panel B. Reading performance, by immigrant status



Notes: Panel A: International migrants are defined as individuals whose country of birth is not that in which they reside. Statlink: *http://dx.doi.org/10.1787/888932320732.* Panel B: Countries are ranked in descending order of the mean score of all students.

Source: Panel A: United Nations Population Division (2008), International Migrant Stock: The 2008 Revision, online version, http://esa.un.org/migration/index.asp?panel=1, accessed June 2010 from OECD (2010), *Trends shaping education 2010*. Panel B: OECD PISA 2009 Database, Table II.4.1.

Potential areas for reflection

Curriculum design is a highly political and domestic matter, so international comparison needs to be interpreted with caution. Therefore, it is important to be reminded that the following potential areas for reflection are identified as a result of desk-based international comparison without stakeholder's views, such as through a country visit, due to the constraints of the working methods involved.

Parental involvement in curriculum development and implementation

Democratic partnership and parental engagement are important aspects of ECE curricula: parents can be an important source of constructive feedback and input to programmes. Co-operation between ECE centres and parents ensures that children receive the opportunity of developing in accordance with children's potential.

Curricula in New Zealand, British Columbia, Manitoba, Scotland and Sweden note that ECE centres should help families by supporting them in their role of raising children, helping them grow and develop, while recognising that the parent remains the prime educator of the child. In New Zealand and Sweden, it is a legal obligation for centres to engage parents in ECE. In New Zealand, British Columbia, Manitoba and Sweden, parents have the possibility to be involved in decision-making processes in ECE (Table 2.2).

Although family and community are integral to the *Te Whāriki* framework and the importance of this is referenced throughout the document, there is little specific attention paid to the role of community members and family in the upbringing of children. *Te Whāriki* is mostly targeted at ECE professionals, and New Zealand could consider targeting it more broadly towards parents, family members and community members as well. A separate section on families in *Te Whāriki* might make relevant sections of the curricula more accessible to parents and might possibly have positive effects on children's home curriculum.

In Sweden, parents are expected to contribute to activities and be included in the curriculum development process. Swedish parents are involved in developing a curriculum specifically for their child and can co-decide (with staff) on the development processes and purposes of their children. British Columbia's Full Day Kindergarten Program emphasises the role of families and communities and their incorporation into kindergarten programmes.

Table 2.2. Engagement of parents in ECEC

Making it a legal obligation	Making it a parental right	Putting it in a policy paper	Involving parents in decision making	Allowing parents to be providers
Australia, Belgium, Czech Republic, Estonia, Finland, Germany, Japan*, Manitoba (CAN), Netherlands*, New Zealand, Poland, Portugal*, Prince Edward Island (CAN), Slovak Republic, Slovenia, Spain, Sweden, Turkey	Czech Republic, Norway, Poland, Prince Edward Island (CAN), Slovenia, Spain, Sweden	New Zealand, Norway, Slovak Republic, Sweden	Australia, Belgium, British Columbia (CAN), Czech Republic, Denmark, Estonia, Finland, Germany, Ireland, Japan, Manitoba (CAN), Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Prince Edward Island (CAN), Slovak Republic, Slovenia, Spain, Sweden, Turkey	Belgium, Germany, Manitoba (CAN), Netherlands, New Zealand, Norway, Poland, Slovak Republic, Sweden

Notes: "Making it a legal obligation" means that ECEC services are obliged to provide opportunities for parents to be engaged in ECEC, or they are obliged to accept the engagement of parents. For Japan and Portugal, "Making it a legal obligation" only applies to kindergartens/preschools; and for the Netherlands, it only applies to child care.

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal", June 2011.

Children's agency and child-initiated play

Play has many forms of expression and can lead to understanding and friendship across ages and linguistic and cultural barriers. Through playful interactions, foundations for learning and social competence can be made.

As previously mentioned, its balanced approach to child development, including the extensive use of play, is recognised as a strength of New Zealand. However, the strong recognition of children's agency and appreciation of "being a child" that influence the Swedish curriculum may not necessarily be echoed in the framework of New Zealand. While the importance of play is addressed in the framework, children's agency does not receive much attention – at least in its description/documentation. Research on curriculum approaches indicates that when children are free to choose their activities and initiate play, this can facilitate confident children with a capacity for life-long learning. Although it is implicit in *Te Whāriki*, New Zealand could consider addressing children's agency more explicitly in the curriculum, which may lead to better communication with a wider range of stakeholders. Sweden's curriculum recommends play to be an "omnipresent activity" and emphasises how play facilitates activities on children's own terms. The kindergarten programme in British Columbia addresses both child-initiated and teacher-initiated play with specific examples of how these can be effective ways for children to learn and develop.

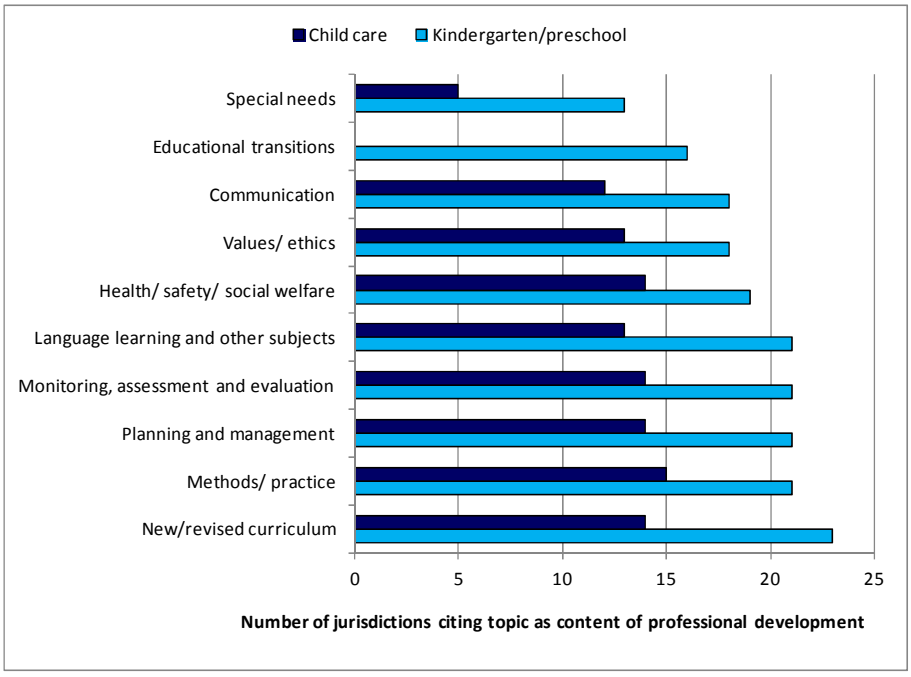
Furthermore, Sweden's curriculum prescribes activities for outside of the centre, whereas New Zealand does not (Figure 2.2.). Since *Te Whāriki* aims at belonging to a community and cultural environment, New Zealand might consider ways to specifically address and encourage the use of the outdoors as an arena for exploration, learning, child-initiated (child-agency based) play and creating respect for natural environments and cultural diversities. The Swedish framework, for example, encourages activities in outdoor environments both within the ECE setting and nature. It uses child-initiated play in outdoor environments to raise ecological and environmental awareness. The framework for five-year-olds in British Columbia also addresses how the natural environment can be a useful setting for children's learning. Furthermore, the explicit point is made that the outdoor arena can provide opportunities to learn about indigenous culture and promote connectedness to one's surroundings.

Staff communication skills for effective implementation

ECE staff require strong skills on how to communicate not only with colleagues on issues arising on the job but also with parents to discuss their child's development.

However, most countries (including New Zealand) do not have a particular focus on communication in the professional training of either child care or preschool staff. ECE professionals might receive some form of training on communication, but there might be a need for more structural training on this, as communication with parents can improve staff's skills to implement curriculum and playroom/classroom practices. Additionally, parents who are well-informed of their child's or centre's curriculum are more likely to use aspects of the curriculum in the home curriculum as well. Oftentimes, parents are dependent on ECE staff to hear about the centre's activities, routines in the playroom/classroom and the curriculum. Little information on this might be available elsewhere, and they might not even know where to find it. Developing staff members' communication skills can encourage meaningful interactions between staff and between staff and parents with possible beneficial outcomes for child and staff development.

Figure 2.6. Content of professional development[5]



Notes: Countries were given a range of topics to select from, including the possibility to list topics not mentioned in the selection. Answers indicating "other" without specifying which topic was referred to with "other" are not included in this figure. Countries with an integrated ECEC system who indicated that the subjects of professional development were similar for the whole ECEC sector/ECEC age range: responses have been included in both "child care" and "kindergarten/preschool" since the content of professional development refers to the whole ECEC age range, including ECEC workers with younger children (herein referred to as "child care").

Source: OECD Network on Early Childhood Education and Care's "Survey for the Quality Toolbox and ECEC Portal", June 2011.

Leadership and classroom management for effective implementation

Although there is an increasing need for the development of leadership skills in many OECD countries, leadership has received only intermittent attention by early childhood theorists and researchers. Additionally, there might be a lack of awareness among ECE staff and managers of the importance of leadership and management skills. However, leadership is of great relevance in ensuring high-quality ECE provision and good implementation of the curriculum, as leadership strengthens staff performance.

While staff in New Zealand are trained on management and planning during their initial education, and there are many possibilities for professional training on this as well, there is not much guidance and support for ECE professionals on playroom/classroom leadership and management. The *Te Whāriki* framework pays little attention to the importance of leadership and management in ECE centres and playrooms/classrooms. New Zealand could consider addressing these aspects more in depth in their curriculum framework. British Columbia's Full Day Kindergarten Program might serve as an example of this: the framework emphasises planning for kindergarten environments, routines and schedules.

NOTES

1 Based on responses from the following countries and regions: Australia, Austria, British Columbia (CAN), Czech Republic, Denmark, England (UKM), Estonia, Finland, Flemish Community (BEL), French Community (BEL), Georgia (USA), Germany, Ireland, Israel, Italy, Korea, Luxembourg, Manitoba (CAN), Massachusetts (USA), Mexico, Netherlands, New Zealand, North Carolina (USA), Norway, Oklahoma (USA), Poland, Portugal, Prince Edward Island (CAN), Scotland (UKM), Slovak Republic, Slovenia, Spain, Sweden and Turkey.

2 Based on responses from the following countries and regions: Australia, Austria, Bavaria (DEU), British Columbia (CAN), Czech Republic, Denmark, England (UKM), Estonia, Finland, Flemish Community (BEL), French Community (BEL), Georgia (USA), Hesse (DEU), Ireland, Israel, Italy, Japan, Korea, Manitoba (CAN), Massachusetts (USA), Mexico, Netherlands, New Zealand, North Carolina (USA), Norway, Oklahoma (USA), Poland, Portugal, Prince Edward Island (CAN), Scotland (UKM), Slovak Republic, Slovenia, Spain, Sweden and Turkey.

3 In the *Early Learning Framework* for children aged zero to five, the Full Day Kindergarten Program only covers children around the age of five.

4 Only regarding the kindergarten curriculum. The *Early Returns* curriculum provides little example practices.

5 For kindergarten/preschool, based on data from: Australia, Austria, British Columbia (CAN), Czech Republic, England (UKM), Estonia, Finland, Ireland, Israel, Italy, Japan, Manitoba (CAN), Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Prince Edward Island (CAN), Scotland (UKM), Slovak Republic, Slovenia, Spain, Sweden and Turkey. For child care, based on data from: Australia, Austria, British Columbia (CAN), Czech Republic, Finland, Israel, Italy, Japan, Manitoba (CAN), Mexico, Netherlands, New Zealand, Norway, Prince Edward Island (CAN), Scotland (UKM), Spain and Sweden.

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CHAPTER 3

WHAT ARE THE CHALLENGS AND STRATEGIES?

Common challenges countries face in enhancing quality in ECE curriculum are: 1) defining goals and content; 2) curriculum alignment for continuous child development; 3) effective implementation; and 4) systematic evaluation and assessment.

New Zealand has made several efforts to tackle these challenges by, for example, covering the entire ECE age range as an integrated system with one national framework; specifying age-appropriate learning areas while focusing on well-being; providing extensive practical information for ECE staff and parents online; and developing an assessment practice for staff. To further efforts, New Zealand could consider strategies implemented by British Columbia (Canada), Scotland (United Kingdom) and Sweden, such as reviewing the curriculum to improve relevance to meet staff needs; developing a framework covering different levels of education; piloting before implementing; and including "curriculum" as an integral part of assessment and evaluation.

This chapter aims to identify alternatives New Zealand could consider when facing challenges in curriculum revision and implementation. It first describes common challenges face by countries and then presents the different approaches New Zealand has been using to tackle the challenges. Lastly, it identifies strategies other countries, including Sweden, Scotland (United Kingdom), British Columbia (Canada) and Manitoba (Canada), have undertaken.

Common challenges

The OECD international survey on quality has identified four common challenges that countries face in designing, revising and implementing a curriculum framework: 1) defining goals and content; 2) curriculum alignment for continuous child development; 3) effective implementation; and 4) systematic evaluation and assessment.

Defining goals and content

When designing a curriculum framework, guidelines or standards, the goals of ECE have to be defined as well as the actual content of the curriculum. Defining these is a challenge in many OECD countries due to the different visions of stakeholders on what the curriculum should aim at and include. Policy makers, researchers, ECE professionals and parents consider that different subjects are important, and each has their own cultural values and ideas about early development. Aligning curriculum goals and contents with the current and future needs of society at large can be challenging, especially with changes, such as increasing migration and advances in information and knowledge economies.

Most countries set out goals, guiding principles and content in their curriculum framework or guidelines, explicitly stating the aims of the country's ECE services, curriculum, the roles of different actors involved in ECE, and the subjects prescribed at the national level. This is most often a result of intensive consultations with the different stakeholders in ECE.

Curriculum alignment for continuous child development

Ensuring continuous child development from birth to primary education is a key challenge in countries with a "split system", where child care and early education are administered by different ministries. In these countries, a lack of a curriculum framework for children aged zero to three is often non-existent; or, if it exists, is not aligned with the curriculum for children aged three to six. The rationale of the split system is often attributed to differences between the two sectors, such as historical roots, different goals and focus on contents.

Ensuring smooth transition from ECE to primary education is a challenge in integrated systems like in New Zealand, Norway and Sweden. Teaching approaches and practices that children experience are often disconnected in ECE settings and compulsory schooling.

Effective communication and implementation

Gaining wide support for curriculum and implementation is a challenge faced by many countries. Without "buy-in" from those who are to implement a change or a new idea, any reform may fail. And the "buy-in" or "consensus" cannot be built – without sufficient and strategic consultation – at the implementation stage.

It is also a challenge to implement the change or new idea without support. The kind of support required for effective implementation depends on various characteristics of the staff as well as contexts.

Furthermore, preparing conditions for staff to effectively implement the curriculum is another challenge. Insufficient guidelines and resources are likely to enhance difficulties, especially for inexperienced staff, new staff or staff with lower qualifications. Certain working environments, such as having too many children to look after, may hinder practising the pedagogy guided in the curriculum.

Monitoring or evaluation of effective implementation at the programme level is another challenge for national governments.

Systematic evaluation and assessment

Determining a curriculum's effectiveness and relevance is challenging for many countries due to a lack of capacity at the policy level for conducting evaluations, collecting valid, informative, credible information and data, and assessment procedures and instruments that combine efficiency and being informative.

New Zealand's efforts

New Zealand has made considerable efforts to tackle the challenges.

To better define goals and content

Clarifying the framework's societal, communal and cultural values

New Zealand's curriculum approach is based on *societal*, *communal* and *cultural values*: the sense of community and cultural heritage and understanding. The curriculum emphasises the critical role of socially and culturally mediated learning and of reciprocal and responsive relationships for children with people, places and things. *Te Whāriki* is founded on the aspirations for all children in New Zealand to grow up as competent and confident learners and communicators, healthy in mind, body and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society. There are four broad principles at the centre of the early childhood curriculum: empowerment, holistic development, family and community, and relationships. Five strands, or essential areas of learning and development, arise from these four principles: emotional and physical *well-being*, a feeling that they *belong* here, opportunities to make a *contribution*, skills and understandings for *communicating* through language and symbols, and an interest in *exploring* and making sense of their environment. Each of these five strands are linked with essential skills or learning areas, such as communication, language development, numeracy and mathematics, science, technology, social sciences, arts, health, work and study skills, problem-solving capabilities, social development and self-management.

Developing age-appropriate content based on children's needs

Te Whāriki puts a high value on age-appropriateness. In order to consider wide variations in the rate and timing of children's growth and development and in their capacity to learn new things in new places, the content of the curriculum in New Zealand is divided into three different age groups, namely infants (birth to eighteen months), toddlers (one to three years) and young children (two-and-a-half years to school entry age). The curriculum builds on a child's current needs, strengths and interests by children-initiated learning that allows children choices and encourages them to take responsibility for their learning. The curriculum for the early childhood years must be flexible enough to encompass the reality of fluctuations in individual behaviour and learning; the needs for repeated, familiar experiences to consolidate concepts and reassure the child; and the need for challenge as a medium for growth.

Te Whāriki is designed to be inclusive and appropriate for all children and anticipates that children's needs will be met, as children learn together in all kinds of early childhood education settings. For children who require resources alternative or additional to those usually provided within an ECE setting, an Individual Development Plan or Individual Education Plan (IDP or IEP) will be developed. New Zealand regards the acquisition of *observation* and *reflection skills* in young children as important, as these skills are expected to stimulate early development. New Zealand's curriculum encourages staff to teach children how to think for themselves, reflect on their own ideas and thoughts, and discuss different opinions to create mutual respect and understanding.

Focusing on experience and meaning rather than mere knowledge acquisition

The early childhood curriculum of New Zealand takes up a "spider web" model of learning that weaves together intricate patterns of linked experience and meaning rather than emphasising the acquisition of discrete skills and knowledge like a "step" or "staircase" model. As *Te Whāriki* implies "a woven mat for all to stand on" in the Māori language, the framework allows many possible patterns for this, as children and adults collectively develop their own curriculum pattern through a process of talk, reflection, planning, evaluation and assessment. The curriculum integrates care and education and includes both specifically planned experiences and activities and interactions that arise spontaneously, whilst recognising the diversity of ECE provisions in New Zealand, such as cultural perspectives, structural differences, organisational differences and different environments. Each strand of the curriculum has implications for the way the ECE environment is managed and organised.

Specifying goals for child experiences and staff's work

New Zealand's curriculum includes several dispositions based on children's experiences, named learning outcomes, for each of its five strands: well-being, belonging, contributions of children, communication and exploration. These dispositions are encouraged rather than taught and, similar to curricula in Nordic countries, reflect the holistic way children grow and learn: cognitive, social, cultural, physical, emotional and spiritual dimensions of human development are interwoven. The whole context around the child (the physical surroundings, the emotional context, relationships with others and the child's immediate needs at any moment) will affect and modify how a particular experience contributes to the child's development. This integrated view of learning sees the child as a person who wants to learn, sees the task as a meaningful whole, and sees the whole as greater than the sum of its individual tasks or experiences.

Since *Te Whāriki* emphasises social relationships and personal well-being, outcomes are formulated in terms of relationships and well-being and are focused on the skills and abilities children should develop rather than actual attainment targets. For each strand, knowledge, skills and attitudes are described, and examples of experiences are given, which help to meet these outcomes. Examples of outcomes include: confidence and ability to express emotional needs, knowledge about how to keep oneself healthy, and a sense of responsibility for one's own well-being and that of others. For staff, questions for reflection are included, which are aimed at guiding staff in stimulating children in their development and improving staff pedagogy and quality. Additionally, for each strand and goals, adults' responsibilities in management, organisation and practice are explained. Each of the strands or learning areas also lists specific links to schooling to stimulate continuity between early childhood education and primary school. This section indicates what skills or attributes children moving from ECE to school likely need to ensure continuous development and lifelong learning, *e.g.*, be able to work co-operatively; have experience in making choices and decisions, setting their own goals and using their initiative; understand basic concepts about rules, rights and fairness; and have established self-care skills.

Evaluating the curriculum to meet changing needs of children

ECE services in New Zealand develop, based on *Te Whāriki*, their own curriculum programme for child development in accordance with the needs of children, parents and the community. Through the use of evaluative procedures, the programme will be continually, or at least regularly modified, to ensure that it continues to meet the needs of children within the curriculum goals. New Zealand also finds it important that *Te Whāriki* as a whole, or a particular range of experiences in the programme, is modified if not working well to meet the needs of children and the goals of the curriculum.

Assessment in New Zealand involves intelligent observation of children by experienced and knowledgeable adults for the purpose of improving the programme. Meaningful insights from observation and reflection can occur when adults listen, watch and interact with an individual child or with groups of children. These continuous observations provide the basis of information for more in-depth assessment and evaluation that is integral to making decisions on how best to meet children's needs. *Te Whāriki* points out that assessment of children's learning and development should always focus on individual children over a period of time. Staff should avoid making comparisons between children, as the needs of children, not assessment procedures, should determine the curriculum.

Ensuring flexibility for local adaption of the curriculum to meet local needs

Each ECE service in New Zealand develops its own curriculum, based on *Te Whāriki*, to meet the needs of its children, families, the specific setting and the local community. *Te Whāriki* is designed to be adapted to local circumstances and children's special needs. Additionally, each curriculum should include a Māori immersion curriculum to recognise and meet the needs of the Māori population and should also address the Tagata Pasifika culture to ensure that the language and culture of the Māori and Pasifika are protected, respected and supported. The curriculum is therefore bilingual and bicultural, developed in both English and Māori language.

Involving a wide range of stakeholders in the design process to ensure stakeholder buy-in

Te Whāriki has been developed from and builds on experience with curriculum development by different early childhood services together with findings in research, international literature, and the shared knowledge and agreed understandings that have emerged in New Zealand over the past two decades on child development. Feedback on the draft document from different stakeholders, including ECE staff, local authorities, researchers and parents, has been taken into account when revising the draft version. The curriculum also considered findings from exploratory studies.

For better curriculum alignment for continuous child development

Covering the entire ECE age range as an integrated system

Te Whāriki has been developed for children from birth to school entry. However, to ensure the framework is age-appropriate, the content is made for three different age groups within ECE: infants (birth to eighteen months), toddlers (one to three years) and young children (two-and-a-half years to school entry age). All five strands of the curriculum are linked to essential skills for early development, and these are also linked to skills needed for children's successful primary education "career".

Aligning ECE curriculum with primary education

Te Whāriki is linked to the *New Zealand Curriculum Framework* for schools. The principles in the school curriculum put emphasis on a "natural connection" across learning areas and competencies as well as the positioning of the competencies as parallel domains alongside

the strands of *Te Whāriki*. For each of the strands of the ECE curriculum (well-being, belonging, contributions of children, and communication and exploration), links have been made with the learning areas and skills in the school curriculum to smoothen the transition from ECE centre to primary school. The emphasis in New Zealand has shifted towards expecting the school "to make connections" with the new entrant child's earlier experience, rather than the child arriving "ready for school". Strengthening the links between the different ECE services has encouraged a growing appreciation of each others' differences and similarities.

For effective communication and implementation

Explaining curriculum in understandable language, avoiding technical terms

The curriculum in New Zealand is explained in understandable language. Because of this, it is found that both staff and parents with different backgrounds have better knowledge about the curriculum. In order to achieve this, *Te Whāriki* includes a dictionary of subject specific terms used in the curriculum. British Columbia did something similar in their framework for zero-to-five-year-olds. This results in better implementation of the curriculum by educators and other ECE staff. It also stimulates expanding the use of the curriculum by parents in home learning activities.

Providing extensive information on the curriculum online for all stakeholders

The website of the Ministry of Education in New Zealand[1] provides widespread information about *Te Whāriki*, including providing the entire curriculum document, guidelines for staff, assessment practices and news on the curriculum. It gives examples of practices staff can use in their ECE centre, gives information on changes or examples of curriculum implementation, and on professional development programmes. The Ministry also has its own official online magazine, the Education Gazette[2], which covers a variety of news articles, notices and vacancies and provides a monthly update to the ECE sector.

Providing "practical" support

Te Whāriki provides professionals with examples of experiences that help meet the outcomes of the curriculum. The support guidance is divided into experiences helpful for infants, toddlers and young children to ensure practices and activities are age-appropriate. It provides ideas for activities and what is important to keep in mind for staff working with children. It also sets out questions for reflection for staff members, which help professionals analyse what they could improve when implementing the curriculum.

Providing training on curriculum implementation

New Zealand focuses staff training on the implementation of *Te Whāriki* and provides training to improve learning outcomes for all young children, especially those at risk. Teachers are expected to strengthen their teaching practices. The government also provides training to support the implementations of *Kei Tua o Te Pae*, Assessment for Learning. Teachers are expected to develop effective assessment practices that meet the aspirations of the curriculum.

Improving working conditions to stimulate effective implementation

Pay parity between kindergarten teachers and primary school teachers in New Zealand has made ECE teaching a more attractive occupation. A funding system that provide incentives for services to employ more ECE-qualified registered teachers has meant that services can afford to pay better salaries, and it has significantly increased the number of registered teachers in the ECE workforce, leading to more qualified teachers in ECE centres who are trained in curriculum and its implementation.

For systematic evaluation and assessment

Developing an assessment practice for ECE teachers in line with the curriculum framework

New Zealand implemented *Kei Tua o te Pae*[3], Assessment for Learning, in which teachers are expected to develop effective assessment practices that meet the aspirations of the *Te Whāriki* curriculum. The national government offers training on this assessment practice to ECE staff. The curriculum programme is evaluated in terms of its capacity to provide activities and relationships that stimulate early development. Such assessment ought to be a two-way process. Children's self-assessment can inform adults' assessment of learning, development and the environment by providing insights that adults may not have identified and by highlighting areas that could be included or focused on for assessment. Children and parents can help in deciding what should be included in the process of assessing the programme and the curriculum.

Implementing narrative assessment practices

New Zealand uses child assessment/development practices as a method for reflecting upon curriculum design and implementation. Children's experiences are described in a Learning Story Framework by staff and children, which focuses on assessment in a narrative form as a story, a connection between the individual learner and the environment. It takes the view that children leave the early childhood setting for further education with some well-established learning narratives or working theories: packages of inclination, knowledge and skills to do with being a learner. The initiative has been released with videos, accompanying readings and workshops, and has provided a useful way for children and practitioners to reflect on ways to implement curriculum and assessment and to develop their own locally-adapted *Te Whāriki*.

Possible alternative strategies: Lessons from British Columbia (Canada), Manitoba (Canada), Scotland (United Kingdom) and Sweden

Alternative approaches from British Columbia (Canada), Manitoba (Canada), Scotland (United Kingdom) and Sweden can provide "food for thought" in overcoming challenges.

To better define goals and content

Explicitly aligning the document with international conventions regarding children's rights

British Columbia's (**Canada**) *Early Learning Framework* is explicitly aligned with the United Nation's Rights of the Child. The alignment affirms the inherent dignity and the equal and inalienable rights of all members of the human family, including children, as the necessary foundation for freedom, justice and peace in the world. The Convention recognises children as citizens with the right to reach their fullest potential, to be treated with dignity and respect, to be protected from harm, to exercise a voice, to engage in play and recreational activities, and to participate freely in cultural life and the arts. The framework aims in helping adults ensure these rights are upheld. Based on this declaration, Canada has developed *A Canada Fit for Children*, a national plan of action that identifies key issues affecting children and opportunities to improve their lives. One of the four central themes of Canada's action plan is promoting education and learning, including the importance of positive stimulation and nurturing in the early years in laying foundations for lifelong learning, health and behaviour.

Basing the framework on research findings

British Columbia's (**Canada**) Kindergarten Programme is based on current research and best practices. The framework clearly refers to research and explains in clear language what research says about certain aspects of curriculum and early development. This research is used

as the basis of the purposes of the framework. As an example, for each learning/development area, it is explained through research why a certain subject or activity matters for children's well-being and development.

Setting up a curriculum development team with experts

Manitoba (**Canada**) develops its curriculum framework with the help of a curriculum development team, which is a working group comprising a departmental project leader/specialist with expertise in the subject area/course under development, in curriculum planning and design, in pedagogy, in assessment and evaluation, and in leadership skills. In addition to managing all facets and stages of a curriculum development project, the project leader can act as liaison with groups, such as subject area steering committees. The project leader also accesses advice and feedback, as required, from key advisors, such as scholars, industry representatives, parents, and educational organisations and associations. Exemplary professionals and scholars who work extensively in curriculum are also part of the development team.

Curriculum development team members are selected through a nomination process. At the outset of a new curriculum project, the Program Development Branch sends letters to Superintendents of Education of provincial divisions/districts, to Principals and to Directors of provisions, requesting nominations of people to serve on the development team. The nomination forms identify criteria on which selection is based, including knowledge of curriculum planning and design, knowledge of the discipline, exemplary classroom practice, ability to work collaboratively and team diversity (*e.g.*, geographical representation, gender balance, multicultural and Aboriginal representation).

Clarifying roles for families, communities and governments

British Columbia (**Canada**) clarified the roles of different stakeholders in its framework documents: the vision of families, communities and governments is that they will work in partnership to support children in building the foundations for early development and lifelong learning. All adults who care for children in their homes and communities are expected to play an active role in supporting children's learning and development. Adults should see young children holistically, provide rich learning environments, listen to and value children's thoughts, feelings and contributions, nurture their individuality and uniqueness, and promote and practice respect for linguistic and cultural diversity. As part of their efforts to understand, value and accept responsibility for promoting early learning, all levels of government and communities are expected to work together to nurture and support children and families, and to support parents, grandparents and other family members in their efforts to promote children's learning and overall well-being.

Developing attainment targets or goals for all children

Scotland (**United Kingdom**) clearly prescribes in its *Curriculum for Excellence* what children should know and experience at different educational levels. The outcomes and experiences are designed based on eight different subject areas, including expressive arts, health and well-being, languages, mathematics, religious and moral education, sciences, social studies and technologies. Taken as a whole, the experiences and outcomes differ per age group and embody the attributes and capabilities each child should achieve.

British Columbia (**Canada**) set out learning goals for all children for zero-to-five-year-olds in its framework. The goals are divided into goals for the youngest children in ECE and children in the preschool years. The learning goals are set for the following four learning areas, which form the core of the framework: well-being and belonging; exploration and creativity; languages and literacy; and social responsibility and diversity. For each learning area, several learning goals have been developed based on the age and development stage

of a child. Each goal includes questions for reflection for the staff, which they can use to analyse whether they conduct their tasks in accordance with the learning goals, and hints as to how they can stimulate development.

Linking development goals to staff guidelines

Sweden's *Curriculum for the Preschool* specifies goals for development with the aim to orientate the work of the preschool and quality development in preschool but does not define child outcomes. The goals are linked to guidelines for staff, which specify the responsibilities of staff. The goals describe the attitudes, ideas and values staff should strive to instil in children, including "openness, respect, solidarity and responsibility", "developing abilities to listen, reflect and express their own views and try to understand the perspectives of others", and "giving children the opportunity of understanding how their own actions can have an effect on the environment". The guidelines explaining the responsibilities for staff clarify their role in relation to the home environment of children and other educational services. Staff are expected to create good relationships with the parents of children and to co-operate with the preschool classes for six-year-olds, primary schools and leisure time centres. Additionally, Norway's framework emphasises the importance of good communication and interaction as well as involvement of parents in the early education of children.

Reviewing the curriculum to improve relevance to meet staff needs

Staff in **Scotland** (**United Kingdom**) found their previous curricula for ages three to five and five to fourteen too descriptive, leaving insufficient room for local adaptation. Therefore, the curricula were revised, which resulted in a curriculum for children aged three to eighteen with less descriptive outcomes and practices. It provides professional space for teachers and other staff to use in order to meet the varied needs of all children and young people.

Sweden has reviewed and revised its preschool curriculum of 1998 to improve and update the content. The revised curriculum came into force July 2011. The pedagogical tasks of the preschool have been strengthened in the revised curriculum by clarifying the goals for language and communication, mathematics, natural science and technology. Furthermore, a new section for follow up, evaluation and development and a new section for the responsibility of the head of the preschool have been added.

The aim was to make the curriculum even more instructive and to give the preschool teachers responsibility according to their education. Evaluation has been a critical area for the staff, and the new guidelines will serve as supervision to develop the quality of the activities. Evaluating the quality of the preschool and creating good conditions for learning requires that the child's learning and development are monitored, documented and analysed. The aim of evaluation is to obtain knowledge of how the quality of the preschool can be developed so that each child receives the best possible conditions for learning and development. Ultimately, this involves developing better work processes, being able to determine whether the work takes place in accordance with the goals as well as investigating what measures need to be taken in order to improve the conditions for children to learn, develop, feel secure and have fun in preschool.

Including research and involving stakeholders in the design process

The *Curriculum for Excellence* in **Scotland** (**United Kingdom**) has built upon existing good practice across different sectors of Scottish education and takes account of research and international comparisons. It recognises the professionalism of staff in the development process. From the National Debate on Education in 2002 through to the drafting and preparation of the experiences and outcomes for publication, teachers were asked to contribute their knowledge and expertise to the process. One of the main responsibilities of development teams was to ensure that they drew on the expertise and advice of a wide

range of staff in early years centres, schools, universities and colleges across all settings where learning takes place. They did this at meetings, events, seminars and focus groups, picking up ideas and case studies of good practice; and they maintained contact with subject networks and other specialist forums. Learning and Teaching Scotland, a non-departmental public body, published the proposed experiences and outcomes in draft format to give practitioners and wider stakeholders the opportunity to comment. There was further engagement during the refinement process leading to publication.

For better curriculum alignment for continuous child development

Reconsidering the age coverage of the curriculum framework

In **Scotland** (**United Kingdom**), *Pre-Birth to Three: Positive Outcomes for Scotland's Children and Families*, guidelines for ECE staff, reflects the principles and philosophy which underpin the *Curriculum for Excellence* for ages three to eighteen. Both curricula build on the same underlying principles: the best interests of children, the central importance of relationships and the need for all children to feel included; and they emphasise four key capacities: to become successful learners, confident individuals, responsible citizens and effective contributors to society. *Pre-Birth to Three* puts emphasis on the importance of family and community engagement and points out the relevance of relationships, responsive care and respect as key features for promoting effective practices for ECE staff. *Curriculum for Excellence* includes experiences that are planned for children and young people throughout their education. These experiences are grouped into four categories: curriculum areas and subjects, interdisciplinary learning, ethos and life of the school, and opportunities for personal achievement.

For effective communication and implementation

Ensuring stakeholder's engagement to improve curriculum implementation

In **Scotland** (**United Kingdom**), anyone with an interest in education was invited to be part of the feedback and revision process of the *Curriculum for Excellence*. The draft experiences and outcomes were published online and accompanied by an online questionnaire for individuals, groups, schools and organisations to feed back their thoughts and views. Additionally, 37 focus groups were held, covering each curriculum area and involving practitioners, senior education managers, representatives from professional bodies, industry, parents and learners to discuss the draft experiences and outcomes. The University of Glasgow was commissioned to analyse the feedback on the experiences and outcomes.

Manitoba (**Canada**) makes use of review panels, which comprise educational partners invited by the department to provide feedback on drafts of a document at various stages in its development. Educational partner representation is co-ordinated by the project leader and may include representatives from various governmental departments/branches, representatives from educational partners, such as business, industry, labour, manufacturing and communications, representatives from professional organisations, representatives from training institutions and representatives from Parent Councils.

Providing support materials for staff and management

The National Agency for Education in **Sweden** published support material and General Guidelines with comments for guidance and supervision for municipality management, heads of preschools and staff in preschools. The agency also has, in co-operation with Swedish Television, made short films to give inspiration on how to implement and stimulate different curriculum subjects, such as mathematics and natural science, in preschool. Additionally, the Swedish curriculum includes guidelines for preschool staff, which specify the responsibilities of teachers to ensure that work is carried out in accordance with the

general goals in the curriculum. The guidelines also specify the responsibilities that each person in the work team has in the preschool. This contributes to a better understanding of the expected tasks of different staff members towards child development.

Providing support and guidance in planning environments, routines and schedules

The Full Day Kindergarten Program of **British Columbia** (**Canada**) dedicated a section in its curriculum to planning the implementation of curriculum in the playroom/classroom. The section guides practitioners in creating meaningful kindergarten environments and planning activities and routines for children. In this section, attention is paid to classroom organisation, the importance of creating a flexible learning environment, and how to set routines and schedules. It provides staff with practical examples of organising and leading a playroom/classroom. It also gives points for reflection, which staff can use to reflect upon their own organisational and leadership skills and what they could improve.

Developing subject-specific support materials

In **Manitoba** (**Canada**), Manitoba Education has developed a kindergarten-level resource for teachers to improve and encourage language competences of children. *Listening and Speaking: First Steps into Literacy: A Support Document for Kindergarten Teachers and Speech Language Pathologists* (2008) assists kindergarten teachers in stimulating the oral language skills of all kindergarten children.

Developing materials that target parents

In **Scotland** (**United Kingdom**), templates to support staff in creating or customising materials for communicating with parents are available online. Learning and Teaching Scotland, a non-departmental public body, also developed information sheets for parents on the importance of different curriculum subjects including literacy, mathematics, transitions between different education systems and outdoor learning. In addition to this, a series of posters were distributed to providers, which can be used to raise awareness among parents about the *Curriculum for Excellence* for the early years.

Focusing training on relevant or emerging curriculum subjects

Sweden focuses training on relevant curriculum subjects to strengthen staff knowledge of the curriculum and the particular subjects, such as language development, mathematics, experimental sciences, child assessment through observation and documentation of learning and well-being. To strengthen staff competence, Sweden has allocated SEK 600 million on continuing education for preschool teachers and child minders for a three-year period running from 2009-11 under the programme “The boost for preschool”. The programme consists of in-service training (university courses) for preschool teachers (ten weeks) and childminders (five weeks) targeted on language/communication and mathematics. Pedagogical leaders for preschool are also offered university courses (30 ECTS, 20 weeks) in language/communication and mathematics and follow-up and evaluation. Teachers and child minders keep 80% of their salary during the study period, co-funded by the government and the preschool principal organisers. This initiative gave staff and management more competence to work with the new, clarified goals in the Swedish curriculum. A key lesson learned from Sweden is that staff competence is decisive for quality in preschool. The education and skills of preschool teachers are one of the most important factors ensuring a successful preschool system. To work in accordance with the curriculum, staff must have good knowledge of young children’s development and learning.

Improving working conditions to stimulate effective implementation

In 2004, **Sweden** granted an increase of SEK 2 million of state funding to local authorities for the employment of 6 000 additional preschool teachers and child assistants. The grant was

intended to reduce class sizes and improve staff-child ratios to 1:5 on average for zero-to-six-year-olds to improve the quality of ECE and qualitative curriculum implementation.

Piloting before implementing nationwide/state-wide

More than 600 early years establishments and schools in **Scotland** (**United Kingdom**) took part in a formal trialling process to test specific experiences and outcomes from the *Curriculum for Excellence* in practice across all curriculum areas. Schools and centres chose experiences and outcomes to trial based on their planned programmes of work. They submitted reports containing detailed feedback, which were used to inform the revision process.

For systematic evaluation and assessment

Integrating "curriculum" as part of the monitoring or assessment process

In **Scotland** (**United Kingdom**), assessment is one of the strands of work in implementing the *Curriculum for Excellence* and *Pre-Birth to Three*. As part of assessment, self-evaluations have been set up in centres as well as monitoring standards and outcomes over time. The framework of quality indicators set out in *How Good is Our School?* and *Child at the Centre* provides a focus for self-reflection on professional practice and curriculum for improvement in schools and centres. Additionally, external inspections are organised to monitor curriculum and practices. The government is working with education authorities and other partners to develop processes for sharing assessment information so that education authorities can use the data to learn about the work of their schools and centres and, where appropriate, support changes in curriculum.

In **Sweden**, the quality of the preschool is regularly and systematically documented, followed up, and evaluated. Evaluating the quality of the preschool and creating good conditions for learning requires that curriculum implementation and the child's learning and development are monitored, documented and analysed. The aim of such evaluations is to obtain knowledge of how the quality of the preschool, *i.e.*, its organisation, curriculum adaption, content and actions, can be developed so that each child receives the best possible conditions for learning and development. Analyses of the results of evaluation indicate areas that are critical for development. All forms of evaluation of quality, pedagogy and activities take the perspective of the child as the starting point. Children and parents can participate in evaluation, and their views are to be given prominence, according to the curriculum. Additionally, self-evaluation kits have been developed so that professionals can evaluate their knowledge of the curriculum framework and their implementation of the framework.

NOTES

1 www.educate.ece.govt.nz/

2 www.edgazette.govt.nz/

3 www.educate.ece.govt.nz/learning/curriculumAndLearning/Assessmentforlearning/KeiTuaotePae.apx

ANNEX. DEFINITIONS AND METHODOLOGY

A **curriculum framework** (**guidelines** or **standards**) is a tool which can guide the content of and approach to children's care and learning.

Curriculum contents can be organised into subject elements or areas. ECEC elements or subject areas highlight priorities and clarify how care, pedagogies and teachings are organised. In the OECD Network on ECEC's "Survey for the Quality Toolbox and ECEC Portal" (2011), countries were asked to choose from a list of nine ECEC elements or subject areas:

1) **Literacy**: refers to all subjects related to reading and writing, including language learning and development, and word recognition.

2) **Numeracy**: refers to all subjects related to numbering and counting, including calculations, number recognition, spaces and shapes.

3) **Science**: refers to all scientific subjects, such as geography and natural science.

4) **Arts**: refers to all subjects related to some form of art, including drawing, colouring, painting and handicrafts.

5) **Music**: refers to all subjects involving music, such as singing, playing musical instruments and dancing to music.

6) **Physical education**: refers to all instructed subjects that require physical effort or are related to physical well-being, such as gymnastics, sports and classes about food or hygiene.

7) **Practical skills**: refers to all practices related to practical skills not mentioned in one of the other subjects (*e.g.*, tying shoe-laces).

8) **Playtime**: refers to the time children can play freely, *i.e.*, child-initiated play: the time that a child can decide for him- or herself what he/she wants to do and play with (inside or outside).

9) **Activities outside ECEC institutions** (external activities): refers to field trips, such as outings to museums, public parks, libraries, concerts, and art and science centres.

There were an additional seven subject areas identified by countries/regions, including religion, ethics and democratic citizenship; health, personal and/or social well-being; social sciences and/or inter-cultural education; ICT; languages (foreign); and learning approaches.

The findings presented here are based on data from the OECD Network on ECEC's "Survey for the Quality Toolbox and ECEC Portal" (2011). For each graph and table, the countries or regions for which data is used are listed.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

Quality Matters in Early Childhood Education and Care

NEW ZEALAND

Early childhood education and care (ECEC) can bring a wide range of benefits – for children, parents and society at large. However, these benefits are conditional on "quality". Expanding access to services without attention to quality will not deliver good outcomes for children or long-term productivity benefits for society.

This series of country reports focuses on quality issues. Each report tackles a specific theme that was selected by the country reviewed. These reports suggest strengths and point to areas for further reflection on current policy initiatives.

Contents

Chapter 1. What does research say?
Chapter 2. Where does New Zealand stand compared to other countries?
Chapter 3. What are the challenges and strategies?

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