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**LITERATURE REVIEW ON PEDAGOGY FOR A REVIEW OF PEDAGOGY IN EARLY
CHILDHOOD EDUCATION AND CARE (ECEC) IN ENGLAND (UNITED KINGDOM)**

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LITERATURE REVIEW ON PEDAGOGY

**FOR A REVIEW OF PEDAGOGY IN EARLY CHILDHOOD EDUCATION AND CARE (ECEC)
IN ENGLAND (UNITED KINGDOM)**

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ABSTRACT

The review was set up to compare the structure and pedagogical ideologies of early years' provision in England to other countries and to explore which policies direct or affect pedagogical approaches and practices. Finally the research evidence on different pedagogical practices on the quality of ECEC and children's development was summarized and discussed. First of all the in-depth analysis of the meaning of pedagogy with regard to other concepts revealed, that it is not always easy to differentiate clearly between pedagogy, curriculum, quality and philosophical approaches. These concepts overlap and they are interrelated. Conceptual overlaps were found for all countries reviewed. For policymakers this means that pedagogy may not only be affected by policies directly aiming at influencing pedagogy but also by curriculum, by quality regulation, by teaching philosophical approaches in teacher training programs etc. Not only general trends with regard to pedagogy (e.g. emphasis on scaffolding and meaningful interactions between preschool teachers and children) can be affected through teacher preparation, curriculum, quality standards and control. The overall regulation of the ECEC system can also influence strongly the variety of pedagogical strategies and approaches in place.

If you compare the ECEC system of England to the ECEC systems of other countries the commitment to the effectiveness in different learning and developmental areas is striking. Secondly, the English ECEC policy now is strongly committed to and based on empirical research evidence. The international research evidence shows clearly that there is still a need for carefully planned studies which look at specific effects on different learning domains in different countries. "Teacher-led" as well as "child-centred" approaches may have certain benefits, and a good balance between different strategies seem to be most effective in the long run. "Teacher-led" approaches seem to be beneficial for the promotion of specific academic skills. But "child-centred" approaches seem to be in particular beneficial for longer-term non-cognitive outcomes such as motivation, self-concept and self-regulation. Play has a major role in many pedagogical approaches throughout the world. Guided play is positively associated with preschool quality and is – through higher quality – beneficial for children's development in different cognitive and non-cognitive areas. Thus, research evidence supports a view that play-based pedagogy is most effective when play-situations are used for meaningful interactions between preschool teachers and children which may be described as using "sustained shared thinking.

Any pedagogy needs to take account of the individual characteristics of the group and needs to be implemented carefully. Preschool teachers need intense professional support to be prepared to offer high-quality learning opportunities as well as to initiate and carry out meaningful interactions.

1 Introduction

1. Over the last years, research has documented convincingly that children entering primary school already differ in their general cognitive, language, pre-reading, and early numeracy skills and that these differences are often maintained at later ages (e.g., Anders et al., 2012; Dornheim, 2008; Dubowy, Ebert, von Maurice, & Weinert, 2008; Magnuson, Meyers, Ruhm, & Waldfogel, 2004; National Institute for Child Health and Human Development Early Child Care Research Network [NICHD ECCRN], 2002a; 2002b, 2005; Sammons et al., 2004; Tymms, Merell, & Henderson, 1997; Weinert, Ebert, & Dubowy, 2010). Promoting children's development, their school-readiness and adjustment seem to be valuable means to raise the achievement levels of all children, but especially of those who experience less stimulation and support in their families. Economists have argued that investment in ECEC programs will have long-term monetary and other non-monetary benefits. The younger children are the higher the returns of investments will be in the long-term (Heckman, 2006; Knudsen, Heckman, Cameron, & Shonkoff, 2006). As an effect, the public and political debate has also stressed the potential benefits of ECEC. All OECD member countries have committed to put a stronger national focus on ECEC (OECD, 2001) and the financial investments in ECEC systems have increased in many countries as will be outlined in more detail in chapter 3. Furthermore, international institutions like UNESCO and the World Bank have encouraged their member countries to invest in ECEC around the world (Dahlberg & Moss, 2005; Penn, 2002).

2. However, research findings clearly indicate: When it comes to ECEC effects the quality of ECEC is the decisive factor for the size and the persistence of potentially beneficial effects (e.g. Sammons et al., 2008; Vandell, Belsky, Burchinal, Steinberg & Vandergrift, 2010). With regard to the effects on children's development, the most relevant quality dimension is the process quality (e.g. Anders, 2013). It refers to the quality of the pedagogical interactions and involves global aspects such as child- and age appropriate behaviour and warm classroom climate (Harms, Clifford, & Cryer, 1998) as well as domain-specific stimulation in areas such as verbal and pre-reading literacy, early numeracy and science (Sylva, Siraj-Blatchford, Taggart, 2003). Pedagogy "refers to that set of instructional techniques and strategies which enable learning to take place and provide opportunities for the acquisition of knowledge, skills, attitudes and dispositions within a particular social and material context. It refers to the interactive process between teacher and learner and to the learning environment" (Siraj-Blatchford, Sylva, Muttock, Gilden & Bell, 2002). Pedagogy defines how adults in early years settings (plan to) engage with children towards developmental objectives, and what direct their methods. Thus, pedagogy is narrowly linked to the quality being offered in ECEC settings. Both – pedagogy and quality – can influence the size and persistence of ECEC effects on children. This link explains the significance of pedagogy. Certain instructional techniques and strategies are regarded to be appropriate for the stimulation of certain areas of learning but not for others. Countries differ in how they define the specific roles and purposes of ECEC. Some countries emphasize the promotion of socio-emotional development, while other countries emphasize the promotion of early academic skills. Especially a country's view on the role and aims of the ECEC system can have an influence on the pedagogy in place. The interrelations between pedagogy, quality and curriculum will be outlined in more detail in chapter 2 and picked up again in chapter 4 and 5.

3. A number of tensions become obvious when discussing potential roles and purposes of ECEC. In many Western contexts, ECEC has traditionally been regarded as an environment for children to explore their worlds together with other children without pressure to engage in formal learning or instruction (Cuban, 1992; Seefeldt, & Wasik, 2002). As a consequence, the value of play- and interaction-based learning has been highlighted (Bredenkamp & Copple, 1997). The recent focus of ECEC to raise achievement levels of all children and compensate for the educational disadvantage of children who grow up in less stimulating or supporting families has clear implications for the objectives of ECEC. This might also influence the nature of ECEC and views on the most appropriate pedagogy. When looking at the development and situation of ECEC in England over the last years, it is noteworthy that different governments have been consistently committed to expanding early years services since 1997. Simultaneously, comprehensive monitoring and quality management systems

have been implemented. Nowadays the ECEC system in England seems to be stronger oriented towards the achievement of certain outcomes and effectiveness than the ECEC systems of many other countries. Furthermore the ECEC system in England is one of the systems with the highest standards of quality control.

4. The current review is set up to answer the following research questions.
 1. How does the structure of early years provision in England compare to other countries?
 2. Which different pedagogical ideologies, theories or approaches exist? How do these differ across countries? Do countries predominantly practice one or a variety of pedagogical approaches? Are practices and approaches very similar across countries or do they differ a lot?
 3. Which policies direct or affect pedagogical approaches and practices?
 4. In which way is early years pedagogy integrated with the formal school system? What are country practices and policies in this?
 5. What are the effects, as found in research, of different pedagogical practices or approaches on quality and child development? Are different pedagogical approaches more appropriate for specific learning objectives, e.g. pre-reading or pre-mathematical abilities?

5. The first four questions aim at comparing early years provision, practice and pedagogy in England with ECEC systems of other countries. To answer these questions in a comprehensive, but meaningful way, Germany, Denmark, France, New Zealand and Japan were chosen as comparison countries. These countries represent European and non-European countries. Furthermore their ECEC traditions contrast notably. The fifth research question is not limited to research in the six countries in focus, but the review aims at summarizing findings of robust and methodologically sound studies.

6. The age range in the scope of this paper is birth until primary school, which differs across countries. In many countries children are enrolled in obligatory primary school at the age of six, whereas preschool attendance is voluntary in most countries. . This review focuses on registered ECEC settings (ISCED 0). Historically, across most countries there has been a division in provision for children under the age of three years (ISCED 0.1) and older preschool children (3 – 6 years, ISCED 0.2). This division is reflected in organization, purpose and objectives, quality standards and also pedagogical approaches. It is therefore taken on in this review wherever appropriate. A constraint in the scope of this paper is that it refers to institutional ECEC settings only but not home-based or informal settings. In many countries home-based services or informal settings (such as childminders, nannies and grandparents) play an important role, especially for children under the age of three years.

7. The next section (chapter 2), addresses the concept of pedagogy. The meaning of the concept is defined and discussed. It explores how pedagogy relates and differentiates from quality concepts, curriculum and pedagogical philosophies. Furthermore this section discusses prerequisites and

influencing factors of the professional (such as staff qualifications), organizational factors as well as further aspects underpinning pedagogy (framework, learning objectives, developmental standards, inspection systems etc.). In chapter 3 the structure of England's ECEC system is described and compared to the structures of the ECEC systems of Germany, Denmark, France, New Zealand and Japan.

8. Chapter 4 provides an overview of the most common or else recognized pedagogical approaches and practices in place. These approaches are defined and explained. In addition, pedagogical approaches and practices mostly in place in England are compared with pedagogical approaches and practices in place in Germany, Denmark, France, New Zealand and Japan. Following up on this, chapter 5 summarizes the research evidence on the effects of different pedagogical practices and approaches on the quality of ECEC, on staff performance, and children's early and later development. The arguments for and against the use of different pedagogies are discussed with a special focus on the situation in England and implications for policy and practice are presented (chapter 6).

9. This paper draws on a broad scope of literature. While theoretical work, monographs and book chapters are fed into chapter 2, together with research findings being published in peer-reviewed journal articles or research reports, the comparison of ECEC systems and pedagogical approaches across countries draws mainly on the analysis of published and grey policy documents (e.g. frameworks, national curriculums) as well as research reports and published ECEC country profiles. By definition quantitative and qualitative research evidence was the relevant source of information for chapter 5, but as the number of robust evaluations was rather low, studies were also included if they would not fulfil all standards necessary for causal interrelations.

2 What is pedagogy?

10. Pedagogy is a term which is broad both in its use and understanding. This paper draws on the definition of Siraj-Blatchford and colleagues (2002) referring to a set of instructional settings and strategies to support children's learning, development and the acquisition of skills, competencies, values and attitudes. Instruction is here used in such a way that indirect teacher behaviours such as planned play-based approaches are not necessarily excluded (Siraj-Blatchford, 2010). Recently, the role of ECEC institutions has changed in some countries in a way that ECEC institutions do not only aim at promoting and fostering children's development, but might also offer services for parents, e.g. parenting courses or counselling. Thus, pedagogy could not only be considered with regard to the work with children, but also with regard to the work with other target groups, especially parents. However, this paper focuses on instructional settings and strategies aimed directly at supporting children's learning and development but not at working with parents' or any further target groups' skills and behaviour. Early childhood pedagogy is closely related to and overlaps with the concepts of quality of ECEC, curriculum and educational approach. Thus, first these three concepts are defined and explained. Subsequently, the concept of pedagogy is explored in further detail and distinguished from the other concepts. Prerequisites, influencing factors and policies are discussed.

2.1 Quality of ECEC

11. The quality of preschool learning is seen as a multidimensional concept covering structural characteristics, teachers' beliefs and orientations, and process quality (NICHD ECCRN, 2002a; 2002b; Pianta et al., 2005). Structural quality refers to aspects such as class size, teacher-child-ratio, formal

staff qualification levels, provided materials and size of the setting. Structural quality is regarded as being subject to regulation by policy and funding. Orientation quality refers to teachers' pedagogical beliefs such as their definition of their professional role, their educational values, epistemological beliefs, attitudes with regard to the importance of different educational areas and learning goals etc. Orientations are thought to develop over the life span and to be relatively stable but changeable. Orientation quality refers not only to the preschool teacher, but also to the aspects comprising the setting, such as the pedagogical approach of the setting and shared educational values and beliefs. Process quality refers to the nature of the pedagogical interactions between preschool teachers and children, the interactions among children and the interaction of children with space and materials. Recent approaches also highlight the quality of interactions between staff and parents (e.g. Lamb-Parker et al., 2001; Reynolds, Mavrogenes, Bezruczko & Hagemann, 1996). Conceptualizations of preschool quality cover global aspects (such as warm climate or child-appropriate behaviour) (e.g. Harms, Clifford, & Cryer, 1998) as well as domain-specific stimulation in learning areas such as literacy, emerging mathematics and science (Kuger & Kluczniok, 2008; Sylva et al., 2003). It is hypothesized that process quality has direct effects on children's learning and development, while structural and orientation quality have indirect effects through their influences on process quality (Pianta et al., 2005).

12. As process quality also refers to the interactions between teachers and children, the close relation to the concept of pedagogy is obvious. Yet process quality and pedagogy are two distinct concepts. Pedagogy defines the set of pedagogical strategies and activities which might be of high or low process quality. However, certain strategies might be correlated with higher process quality and thus lead to a better promotion of children's learning. This question will be answered drawing on research evidence (see chapter 5).

2.2 Curriculum

13. Curriculum and pedagogy are conceptually not the same, but unfortunately both terms have been used simultaneously in many countries (see Siraj-Blatchford, 2010; for a discussion) which led to confusion with regard to the specific functions and roles of pedagogy and curriculum in ECEC settings. The term curriculum in a narrow sense describes the "what" of teaching. It refers to the contents of early childhood education such as learning areas and learning goals. But it needs to be recognized that learning in early childhood has a specific nature compared to learning at later ages. Children's development and learning often cannot be distinguished. Children's learning quite often takes place in play-based situations and happens implicitly. So, learning sometimes takes place irrespective of the fact if the adults design the environment to provide specific learning opportunities or not (Siraj-Blatchford, 2010). The recognition of this fact has led to very broad definitions of curriculum such as "the sum of all experiences in childhood settings". In addition, it is found that curricular frameworks for ECEC in many countries not only define contents of education, but also refer to educational approaches, the view of the child, pedagogy or recommendations for quality management (see chapters 3 and 4). So it is not surprising that pedagogy and curriculum are sometimes understood to be interchangeably

14. However, the use of non-distinguishable definitions of curriculum and pedagogy sometimes seems to provoke the misunderstanding that certain learning goals must go hand in hand with the emphasis on certain pedagogical strategies. International comparisons of ECEC systems often differentiate two types of curriculum approaches: the academic, early education approach and the comprehensive or social pedagogy approach (Folke-Fichtelius, 2013, OECD, 2006). Countries that follow the academic approach provide preschools that serve to prepare children for school with concrete learning goals for children to achieve and often use standardized tests to measure children's knowledge. Countries following the socio-pedagogic tradition stress content and quality of practice rather than assessing children's achievement levels. In some countries following the socio-pedagogic

tradition, stake-holders and practitioners strongly decline knowledge assessment of preschool-aged children and predetermined set standards (OECD, 2006). Concerns have been articulated that the movement towards a stronger academic, educational approach also changes preschool practice to a school-type way of teaching. This is often referred to so-called “schoolification” (e.g. Garnier, 2012).

15. It seems to be widely accepted that the implementation of learning goals in academic areas such as mathematics, literacy and science is a synonym for “schoolification” of ECEC, whereas the promotion of socio-emotional development and personal values go automatically hand in hand with child-centred or socio-pedagogic approaches (Bennett, 2006). Different reasons can be identified that led to this widely accepted belief. First, a number of specific programmes to teach early academic skills such as early mathematics or literacy have been developed by trying to transfer primary school programs to preschool learning. Secondly, ECEC systems with clear definitions of learning goals for early academic skills are also often those ECEC systems that accept teacher-directed, instructional techniques in preschool settings. Examples for such systems are conceptualizations of kindergarten in the USA or the French ECEC system. On the other hand ECEC systems that prioritize the promotion of socio-emotional development and personal values and often ECEC systems that also prioritize child-centred pedagogy and refuse the use of teacher-directed, instructional pedagogy in preschool settings. Examples for such ECEC systems are the system of Germany or some Scandinavian countries. However, the author of this review holds the view that the question of whether certain learning goals are achieved most efficiently with certain pedagogy needs to be subject to research evidence.

16. In this paper the term curriculum is used solely to refer to the contents of teaching. This narrow definition seems to be especially appropriate for this literature review which needs a clear distinction between the “how” and the “what” of teaching. This differentiation also seems to be necessary to objectively evaluate if certain pedagogical strategies are more or less beneficial to acquire certain learning goals.

2.3 Pedagogical Approach

17. Whereas pedagogy refers to the science and art of teaching, the pedagogical approach comprises the overall perspective used to plan and implement one or more instructional strategies. Examples of influential educational approaches in ECEC are those of Maria Montessori, Reggio Emilia, situation-oriented approach, Fröbel, Freinet or Steiner. Educational approaches in ECEC describe belief systems comprising attitudes on the role of the preschool teacher, the view of the child and the understanding of teacher-child-relationship. Educational approaches also explain the roles of materials and space as well as appropriate pedagogy and sometimes learning objectives. Thus, assumptions on the nature of appropriate pedagogy are part of pedagogical approaches. The description and development of specific instructional strategies and techniques are often at the heart of educational approaches. But they go beyond pedagogy. They also cover beliefs and values that are not part of pedagogy (e.g. certain religious or spiritual beliefs). Some educational approaches prioritize certain contents of ECEC and therefore cover aspects of curriculum in the above described sense. For example, the material developed by Fröbel is designed to promote especially the development of early spatial and mathematical skills. The situation-oriented approach defines social responsibility as a prior educational goal. Educational approaches and pedagogical concepts inform and feed into early years practice. Furthermore, pedagogical approaches are sometimes used as synonym for the most characteristic instructional strategies of an educational approach. For example, preschool centres may describe their work as “Montessori-type” to refer to the fact that the educational principle “teachers serving as guides” is dominant in their work. It is not always possible to distinguish pedagogy and pedagogical approaches as concepts when investigating the research evidence.

2.4 Pedagogy

18. Pedagogy describes the practice of teaching, but as Siraj-Blatchford and colleagues (2002) pointed out “in the early years any adequate conception of educative practice must be wide enough to include the provision of learning environments for play and exploration”. The terms ‘teaching’ and ‘classroom’ seem to be unhelpful for ECEC practice in many countries, especially for those countries with ECEC systems being developed in a socio-pedagogic tradition. Teaching in classrooms provokes the association of a ‘schoolification’ of ECEC. In this paper the term instruction refers to all processes aiming at initiating or maintaining learning processes (Creemers, 1994). Thus it comprises the whole portfolio of specific didactic techniques such as phonemic awareness techniques, integrating technology, strategies to encourage interaction among the students and to foster cooperative learning, differentiated instruction, goal setting, assessment, documentation, cross-curriculum teaching, means of sustained shared thinking, preparing physical environments, material and learning environments and play-based approaches.

19. The relative benefits of different instructional approaches in early childhood have long been debated (Stipek, 1991). Typically, teacher-directed, didactic approaches have been contrasted to child-centred approaches. At the same time teacher-directed approaches have been associated with the acquisition of basic skills and knowledge, whereas child-centred approaches have been discussed to stress socio-emotional development and problem-solving abilities. Other researchers have expanded this dichotomy to a two-by-two categorization with the role of the teacher (high initiative / low initiative) being one factor and the role of the child (high initiative / low initiative) being the other (e.g. Weikart, 2000; Siraj-Blatchford et al., 2002; Stipek, 1991). The result is a pattern differentiating between programmed approaches, open framework approaches, custodial care approaches and child-centred approaches.

20. However, this pattern does not fully capture the role of the spatial and physical environment that is strongly involved in certain pedagogical approaches. For example the Montessori-approach introduces the spatial environment as an additional teacher in ECEC settings. Furthermore, the two-by-two classification does not reflect the potential role of play in ECEC pedagogy, as play-based approaches in this conceptualisation seem to assume a rather passive role of the teacher in day-to-day interactions. Samuelsson and Carlsson (2008) discuss the role of play in early childhood pedagogy. They highlight that play and learning have often been contrasted, the one being initiated by the child, the other being initiated by the teacher. In addition, play and learning seem to be seen as separate processes, but both are natural components of children’s everyday lives. Thus, pedagogical styles suited to the characteristics of young children need to take account of the fact that children naturally develop through play. However, in many countries there are observable theoretical back and forth shifts in how teaching and learning in ECEC settings should take place. Ideas about individualistic learning and development are replaced by ideas about the social and cultural nature of learning (Anning, Cullen & Flear, 2004) and vice versa. This includes the debate of the role of interactions between adults and children, and between children themselves. These theoretical debates on pedagogy also influence the debate about quality in ECEC settings (Flear & Richardson, 2004).

2.5 Factors influencing pedagogy

21. Following up on the introduction and explanation of the concept of quality, important prerequisites of pedagogy and influencing factors are presented and discussed here.

22. It has already been revealed that the concepts of pedagogical quality, curriculum and educational approach are closely related to and have overlaps with pedagogy. Thus, they may also

affect pedagogy in one way or the other. The societal framing conditions, the financial and personal resources influence the pedagogical work in ECEC settings. Thus, different aspects of structural quality naturally influence pedagogy. For example, the possibility of individualizing teacher-oriented approaches is dependent on the number of children per teacher. In addition, certain pedagogies make use of the spatial-physical environment in a certain way and also use specific materials (see above). Preschool teachers' beliefs and educational values, their views on their own professional role and their views on children's development underpin the learning opportunities they offer, their teaching and their every-day interactions. Thus, aspects of orientation quality have, as well as pedagogical approaches, naturally strong impact on pedagogy (Pianta et al., 2005). The overlaps between pedagogy and process quality have been described above.

23. It is assumed that preschool teachers need a number of professional competencies and skills to offer high quality learning opportunities for young children. Thus, professional competencies of preschool teachers also affect pedagogy. Current theoretical frameworks describing the professional competencies of preschool teachers consider different dimensions to be important, but they generally include: professional knowledge, pedagogical beliefs and orientations, emotional attitudes as well as motivational aspects (Anders & Rossbach, in press; Siraj-Blatchford et al., 2002). Pedagogical beliefs and orientations of preschool teachers are discussed as one dimension of quality as well as facets of preschool teachers' competence.

24. Lee Shulman (1986, 1987) conceptualised different dimensions of teachers' professional knowledge; he distinguished content knowledge (CK), pedagogical content knowledge (PCK) and general pedagogical knowledge (GPK). Whereas content knowledge is defined as the knowledge about a subject and its internal structure, general pedagogical knowledge relates to the broad principles of classroom management and organization as well as knowledge in developmental psychology. This includes the *general* "how" of teaching. In contrast, pedagogical content knowledge includes the "how" of teaching *specific contents*, generally acquired through education coursework and experiences in schools (Ball, 2000). It is the "knowledge of subject matter for teaching which consists of an understanding of how to represent specific subject matter topics and issues appropriate to the diverse abilities and interests of learners" (Shulman, 1986). The concept of teachers' professional knowledge has been transferred to early childhood education as well (Aubrey, 1997; McCray, 2008; Siraj-Blatchford et al., 2002; Tirosh, Tsamir, Levenson, & Tabach, 2011). When describing aspects of preschool teachers' professional knowledge one needs to take into account the fact that contents of preschool education are different than contents of elementary or secondary school education, and as a consequence professional knowledge for preschool content is significantly different from professional knowledge for elementary or secondary content. For example, mathematical content relevant to preschool is comprised of areas such as number sense, pattern, ordering, shapes, spatial sense and comparison (Ginsburg, Lee, & Boyd, 2008; Smith, 2000). PCK refers to how to introduce these concepts; PCK for the content area of pattern for example relates to how to introduce the concept of classifying, sorting, analysing simple patterns and describing pattern change to young children. Concepts of preschool teachers' PCK need to consider the fact that pre-schoolers have different knowledge representations than primary school students; and that the learning of pre-schoolers takes place often in play situations. Thus, preschool teachers' sensitivity to educational content in play situations and the ability to interact adequately seem to be important aspects of PCK for ECEC (Anders & Rossbach, in press). The notion that a demanding set of professional competencies are required to perform adequately as a preschool teacher goes hand in hand with the assumption that adequate formal qualification is required for offering certain instruction and learning opportunities (Kelley & Camilli, 2007; Whitebook, 2003).

25. Further aspects that can influence pedagogy are characteristics of the children. Children of certain ages, the age-mix of the group, the cultural and language backgrounds of the children or the existence of special educational needs may call for specific instructional settings and strategies to support children's learning.

2.6 Policies affecting pedagogy

26. Policy and regulation can direct or affect pedagogical approaches and practices. This might happen through direct or indirect links. First of all, the overall level of centrality and control does not necessarily impact the kind of pedagogy put into practice, but the variability. Decentralised systems which leave a lot of responsibility and decision-autonomy to the communities and individual settings also promote variability of pedagogical settings and strategies in practice. The scope and nature of early years pedagogy also depends on the ministerial affiliation of the ECEC system (education versus social welfare) and how the ECEC system is integrated with the formal school system. Pedagogical practice may also be directed by control and inspection.

27. The curriculum and its binding character is a further central area of policy impact on ECEC practice and pedagogy. Furthermore, the existence of developmental goals and standards for development in ECEC impact pedagogical practice. Indeed, it is apparent that priorities in directions of ECEC quite often go hand in hand with certain pedagogical approaches and beliefs (see chapter 4).

28. The preschool teacher has the key role in putting pedagogy into practice. Thus, policy can influence pedagogy via controlling formal requirements and contents (curriculum) of teacher training programmes. The qualification of preschool teachers is one of the most important aspects of regulation, ECEC policy and quality assurance. At the same time, (mandatory) further professional development programmes can also affect pedagogical approaches and practices. Any policy and regulation of further development programmes can also impact pedagogy.

29. Finally, policies that regulate the composition of children in ECEC settings can also influence pedagogy. Examples are: regulation of number of children, age-range of children, split or integrated systems for children with special educational needs, composition based on quotas for children with immigration background. The country profiles in chapter 3 and 4 will show clearly how different countries organize their ECEC system and teacher training. It is also apparent that countries differ strongly in how to implement curricular approaches.

3 Context – structure of ECEC systems in place

30. The ECEC systems of five countries were chosen to be compared with the ECEC system of England: Denmark, France, Germany, New Zealand and Japan. These countries were chosen as they represent different contexts, ECEC traditions (e.g. socio-pedagogic tradition versus educational tradition), systems of regulation and administration (e.g. centralized versus decentralized), systems with regard to staff qualification (e.g. teachers trained at university level versus vocational level), curriculum (e.g. national curriculum defining learning standards and learning goals versus regional mandatory frameworks) and quality assurance (e.g. national inspection system versus no inspection). The previous section showed clearly that all these factors might influence pedagogy. Some of them, e.g. curriculum will be revisited in more detail in chapter 4.

3.1. Context Characteristics

31. Politically, England, Denmark, Japan and New Zealand are all constitutional monarchies with parliamentary systems, while Germany and France are republics. All countries are divided into smaller local authority areas for purposes of public administration. There are 152 local authorities in England, while in the other countries the number of public administration units ranges from 16 Bundesländer (federal states) in Germany to 98 municipalities in Denmark and 101 departments in France. Table 1 provides an overview of several demographic and social indicators that potentially play a role in the organization and delivery of ECEC. While England and Germany have a higher

proportion of foreign-born population, societies of Japan and Denmark are extremely homogenous (Naumann, McLean, Koslowski, Tisdall and Lloyd, 2013). In New Zealand, on the other hand, most of the population is of European descent (74%) followed by Maori (14.9%) and Pacific (7.4%) ethnic groups; the official languages are English and Maori, which is reflected in the ECEC structure and legislation (Naumann, et al., 2013). France has the highest fertility rate in Europe, in the same rank with New Zealand, while Germany and Japan have one of the lowest in the world. In addition, Japan's population is currently the oldest in the world, with more than a quarter of the population over 65 years (World Population Review, 2014). Denmark and France are characterized by high living standard with high government expenditure and extensive welfare system. These background characteristics can influence organization and pedagogy of ECEC systems directly or indirectly. For example: adequate pedagogy to deal with cultural diversity will be more relevant in countries with more cultural diverse societies.

32. All of the countries have regulations on minimum parental leave policies, which influence the timing and the amount of the uptake of ECEC services. One crucial aspect is the relationship between the leave policies, in terms of duration and payment, and ECEC entitlement. The leave is usually divided into maternity leave, stipulated by International Labour Organization at minimum of 14 weeks, paternity leave, and parental leave which can usually be shared between the parents (OECD, 2014). An overview of the duration and the average payment rate of the maternity, paternity and parental leaves in each of the countries can be found in Table 2.

33. According to the report by Moss (2014), England has the longest maternity leave entitlement, in duration of 52 weeks, followed by Denmark with 18, France with 16 and the rest at the minimum of 14 weeks. Together with paternity and parental leave, the longest possible post-natal leave in England is 20 months, but most of this time is unpaid or low-paid; only 6 weeks of maternity leave are paid at high rate, by the employer, compared to all of maternity leave in Denmark and France (O'Brien, Moss, Koslowski & Daly, 2014). Every child is entitled to part-time nursery education from 3 years of age, which leaves a gap of 16 months between the end of leave and ECEC entitlement, and a gap of almost 3 years between the end of well-paid leave and ECEC entitlement¹ (O'Brien, et al., 2014).

34. When payment and flexibility are taken in account, the policies in Denmark and Germany seem to provide the most flexibility for families. Maximum leave period in Denmark is 19 months, including 18 weeks of maternal leave, 2 weeks of paternity leave, and 32 weeks parental week per parent, one of which is fully paid (Moss, 2014). Altogether, leave paid, by the state, at 100% of earnings, with a ceiling amount, is available for almost one year, and can be prolonged up to 14 months, at a lower pay, while ECEC entitlement starts at 6 months of age, so there is an overlap between the two, allowing parents to choose when they want to go back to work (Bloksgaard & Rostgaard, 2014). In Germany, the maximum period of parental leave, which is a family entitlement, is three years, at the end of which the ECEC entitlement starts, so there is no gap between the two (Blum & Erler, 2014). However, only the first 12 months are paid, by the federal state, at a high rate, which leaves a gap of 18 months between end of well-paid leave and ECEC entitlement (Blum & Erler, 2014). While in Denmark the entitlement entails full-time provision, in Germany this is not specified and there is a difference between Western states, offering mostly part-time service, and Eastern states, offering in general full-time provision (Blum & Erler, 2014).

35. In France, there is also no gap as the end of parental leave, available for maximum of three years, falls at the start of the ECEC entitlement (Fagnani, Boyer & Thevenon, 2014). However, the leave paid at a high rate, funded from health insurance, lasts only up to 4 months (16 weeks of maternity and 2 weeks of paternity leave), so there is a large period of low paid or unpaid leave for more than two and a half years before the child is guaranteed a place in ECEC (Fagnani, et al., 2014). Similar situation is in New Zealand, where the entitlement starts at 3 years of age, and only for part-time nursery care, while the longest leave is one year, with paid part (from general taxation) lasting up

¹ Entitlement here refers to a guaranteed place in ECEC, which is in some cases also free or subsidized. More details in following sections.

to 14 weeks (McDonald, 2014). Lastly, in Japan, the local authorities have an obligation to provide childcare places for children below school starting age who “lack” care because of parent’s work or health issues, but there is no general entitlement for ECEC, and the longest possible leave is 14 months (one year of parental leave, plus two bonus months if parents share the leave), with 8 months being paid at a high rate by the Employment Insurance system, financed by employees, employers and the state (Nakazato & Nishimura, 2014).

3.2. Regulation and Administration of ECEC

36. Table 2 provides an at-glance overview of policies and statistics related to regulation and administration of ECEC. ECEC services include all services for children prior to compulsory schooling age, which is set at age 5 in England, and 6 in the other five countries. In New Zealand, however, children are allowed to start primary school as soon as they turn 5, and most of them do so, so only about 4% of 5 year olds are still in ECEC (Ministry of Education, 2014; Statistics New Zealand, 2014). While some countries, including France and Japan, have a split system, separating education from care, in England there is no such division, and the responsibility for all early years services lies within the Department of Education. Denmark, New Zealand and Germany also have fully integrated systems. However, unlike in England, Denmark and New Zealand, in Germany the ECEC services are not located within the public education system, but within the child and youth welfare sector. ECEC services are not compulsory in any of the countries. In all of the countries, except of Japan, there is some level of entitlement to ECEC. A place is secured for all children over 26 weeks of age in Denmark, one year in Germany (not specified if full- or part-time), some qualifying two year old children in more deprived households and all children over age 3 in England and France, and over age 3 for 20 hours per week in New Zealand (Bennett & Tayler, 2006; Naumann, et al., 2013; Moss, 2014). In Japan the entitlement for ECEC is assessed on individual basis, based on child’s age, parent’s working hours and earnings (Nakazato & Nishimura, 2014).

37. In France and Japan the age split between education and care is at 3 years of age, with younger children generally being enrolled in care services, and older attending preschool-type institutions. Services for children under three in France are varied, depend on both public and private initiatives, and fall under regulation of the Ministry of Social Affairs, Employment, and Solidarity and the Ministry of Health, Family, and Handicapped Persons (OECD, 2004). The different types of collective childcare settings are referred to as *l'établissements d'accueil des jeunes enfants* (EAJE) and include centre-based full time or part time public, for- and non-profit and parent-run institutions. In addition, some children are looked after by licensed childminders. Children between three and six (and some disadvantaged two year olds) attend the *école maternelle*, which are institutions for early childhood education prior to compulsory education, serving to provide care for children, educate them and prepare for subsequent schooling (Garnier, 2011). They operate during school year for 24 hours per week and have an instructional approach that is similar to regular schooling, with large class sizes (Eurydice, 2014). Preschool education is organized and completely funded by the state, and it falls under responsibility of the Ministry of Youth, National Education, and Research, which defines the curriculum, opening hours, and operations (OECD, 2004). It is available to all children, but it is not compulsory. The split between care and education is somewhat less clear in Japan, where care is provided in day nurseries (*hoikuen*) for all children under compulsory schooling age and falls under the welfare sector, while education is overseen by the Ministry of Education, Culture, Sports, Science and Technology and provided in kindergartens (*yōchien*) for children between ages three and five. In 2006 the two ministries and the central government passed a law that allowed for establishment of ECEC centres (*kodomo-en*), which combine education and care and these facilities are becoming more widely used with time (Abumiya, 2011). Day nurseries are either publicly or privately provided, while kindergartens are mostly privately owned. Most ECEC services are provided at less than full-day basis, so many children are still looked after in family settings, for at least some time, if not exclusively. Most common caregivers are mothers or grandparents (Abumiya, 2011).

38. Early education and childcare in England encompasses a wide range of services. Formal provision includes nurseries (day nurseries, nursery schools, nursery classes), playgroups, children or family centres and childminders (DfE, 2013b). Many children are also looked after informally by, grandparents, friends and neighbours, nannies or other home carers (Naumann, et al., 2013). Services available in Germany are varied as well and represent the different traditions in Western and Eastern federal states: the traditional ‘kindergarten’ serving children between ages 3 and 6 years, infant-toddler centre (*Kinderkrippe*) serving children between ages 0 and 3 years, day-care (*Kindertagespflege*) for all children below school enrolment age and home-based day-care (*Tagespflege*) or family centres and childminding. In Denmark all services are delivered on a full-day basis and it is up to local authorities to secure places for all children. Some services are distinguished by age group, such as nurseries (*vuggestuer*) that take children under 3 years of age and kindergartens (*børnehaver*) that accept children between 3 and 6 years of age. The majority of care is, however, provided in age-integrated day-care centres (*aldersintegrerede institutioner*) which include both a nursery and a kindergarten and allow for continuity of care. Childminding (*dagpleje*) is another age-integrated option available, but it is most often used for children under 3 years. All of these services constitute formal ECEC provision for preschool children and fall under the umbrella term of day-care centres (*dagtilbud*). Law forbids informal care by a non-family member. In New Zealand services are divided into teacher-led and parent-led services. Teacher-led services available include kindergartens, accepting children between 2 and 5 years of age for age-divided sessions or more flexible-hour and all-day sessions integrated across ages, Education and Care services, accepting children from birth to school age for all-day or flexible-hour sessions which can be organized according to a particular cultural topic or follow predetermined programs such as Montessori or Rudolph Steiner, and Home-based Education and Care, accepting children aged 0 to 5 for sessions in small groups, up to 4 children in educator’s or children’s own home (Naumann, et al., 2013). Parent-led services all accept children from birth to school age and include *Kōhanga Reo*, which provide Māori language and culture immersion education, play centres, which focus on parent education and children learning, and playgroups, which are community based groups that meet for one to five sessions a week and provide environment for play and learning (Ministry of Education, 2014). There are specific playgroups that focus on preservation of Pasifika language and culture. The fees in parent-led services are often lower, as parents are required to participate in organization and management of the services; however, parents are not required to be present with their child at all times (Ministry of Education, 2014). In addition, due to extremely low population density, for children with limited access to ECE, there is a Correspondence School, allowing parents to borrow materials and work with educators to develop a program for the child.

3.3. Financing

39. In Denmark, for all children, and in the educational sector (children over three years) of ECEC in France, most of the costs are covered publicly. The local authorities in Denmark are obliged to provide a subsidy for the entitled place for each child directly to the provider, covering at least 75% of the expenses (Naumann, et al., 2013). Since 2010, meals are also included with all day care services. If the local authority cannot offer a place, they must offer to cover either the parents’ expenses for a private care scheme or the expenses for a place in another local authority. Under the free-choice scheme², parents who do not wish to have a place for their child in a public day-care facility can get financial support from local authorities for a private care scheme (Socialministeriet, 2000). In addition, there are reductions in parental fees for parents with low income, who pay between 0-25% of the ECEC operating costs, and for those with more than one child (PLA Copenhagen, 2013). In France the *école maternelle* is funded by the state and provided free of charge for the parents (Naumann, et al., 2013). Meals are not included, but can be subsidized for families in need. In terms of childcare (children aged 0-2), parents are required to pay for approximately 27% of costs, while the

² “*Fritvalg-ordninger*: Free-choice schemes. Parents are offered grants for private care of children from the age of 24 weeks until they begin in a pre-school class at a primary school.” Socialministeriet (2000)

rest is financed through different allowance schemes by the national family allowance fund *Caisse Nationale des Allocations Familiales* and the decentralised *Caisses des Allocations Familiales* (Naumann, et al., 2013). In New Zealand parents need to cover similar proportion of ECEC expenses as in France, with government covering for about 75% (Arnold & Scott, 2011). Generally, Ministry of Education subsidises up to 30 hours of ECE a week for all children. All 3 to 5 year old have a right to 20 Hours ECE, which is provided free of compulsory charges for parents. If claimed 20 Hours ECE hours replace the hours of subsidized ECE (Ministry of Education, 2014). However, kindergartens are generally more publically funded (90%) compared to home-based services (51%) (Naumann, et al., 2013).

40. ECEC in England is a mixed economy, partly financed by the state and partly by private individuals and organisations. The central government provides funding to local authorities so that every 3 and 4 year old, as well as two year old children living in the 40% most deprived households, have access to funded part-time nursery education (DfE, 2013a). This funding covers a funded entitlement to early education, for 570 hours per year, commonly taken at 15 hours per week, for 38 weeks of the year. In 2014, 56% of all three and four year olds benefited from funded early education (DfE, 2014b). Parents can purchase additional hours of ECEC, part of which may be subsidised through the childcare element of Working Tax Credits or Employer Supported Childcare. In Germany, the situation varies from one federal state to another. Municipalities are in charge of organising and securing funding for early education and care provision. They co-operate with a variety of service providers, with the non-governmental providers and churches playing a particularly important role. The funding provided by the governments varies between the federal states and so does the required parental financial contribution. Financial contributions of parents are dependent on their income. Some federal states offer free entitlement for one, two or three years before formal school enrolment.

41. In Japan, while Ministries and prefectures subsidize some of the costs of private daycare, the public expenditure on ECEC is close to minimum (Taguma, Litjens & Makowiecki, 2012). Public daycare centres have smaller fees, but there is a large demand for places and a place cannot be guaranteed. Also, they have shorter opening hours, which might not be appropriate for families where both parents are employed (Holthus, 2010).

3.4. Attendance Rates

42. Attendance rates of ECEC services in England are comparable to other countries in this review. In general, smaller proportion of children under the age of three are in receipt of childcare (e.g. 58% in England in 2012), as in most countries parental leave lasts for at least some portion of this time (Huskinson, et al., 2014). The vast majority of children between ages of three and compulsory schooling age are enrolled in some type of ECEC (e.g. 97% in England in 2014) (Huskinson, et al., 2014; DfE, 2014b). The list of the percentages can be found in Table 2. Denmark and France, with universal entitlement and mostly publicly covered costs of ECEC (education sector in France) are close to reaching full enrolment for children above the age of three, with 97.3% of children over three enrolled in ECEC in Denmark (2013) and 97-100% in France (2011), depending on the region (Naumann, et al., 2013; Statistics Denmark, 2014; own calculations). While New Zealand seems to have a lower enrolment rate for the older group (66.5% in 2013), it is important to note that most 5 year olds are already enrolled in primary school, even though under compulsory schooling age (Ministry of Education, 2014). When excluding them from calculations, the attendance rate for 3 and 4 year olds goes up to 98.2%, which is comparable to France and Denmark (Statistics New Zealand, 2014; Education Counts, 2014; own calculations). While this figure was also over 90% in Germany in 2012, the use of non-familial early childhood education and care (ECEC) in the first three years of children's lives is still only low compared to other countries; in 2012, 27.6 % of all children under three used day-care, which is comparable to Japan with 25.9% in 2010 (Autorengruppe Bildungsbereichterstattung, 2012; OECD, 2014). Denmark has an exceptionally high enrolment rate

for children under the age of three (67.9% in 2013). This is even more emphasized, if taken in account that parental care dominates only for children below age of one; the enrolment rates for one and two year olds in 2013 were 89.2% and 93.2% respectively (Neumann, et al., 2013; Statistics Denmark, 2013; own calculations).

3.5. Workforce

43. In group care facilities in England, 50 % of the caregivers in charge for children under 3 years of age are required to have a relevant level 2 qualification as they are called in England (equivalent to ISCED level 3), while at least one practitioner must have a qualification at level 3 (ISCED level 4); additionally for children under 2 at least half of the staff has to have relevant training and experience in caring for infants (DfE, 2014a). For children over three to operate a ratio of 1:13, at least one practitioner has to have qualification at level 6 (ISCED level 6), corresponding to the ‘Early Years Professional Status’, and another staff member at level 3 or ISCED level 4 (DfE, 2014a). For children over three, to operate at a ratio of 1:8, at least one practitioner must have a relevant level 3 qualification (ISCED level 4) and at least half of all other staff must hold a relevant level 2 qualification at ISCED level 3. On-job training is mandatory for all ECEC professionals. In Denmark about 60% of staff in all day-care facilities are pedagogues with a professional bachelor degree in social education (ISCED level 6), which is the same level required in kindergartens in Japan and New Zealand and in nurseries in Japan, as well as for child nurses and pedagogues (‘educators’) in the care settings in France. Teachers in the French ‘*écoles maternelles*’ require a Master’s degree at ISCED level 7 (Neumann, et al., 2013; ECE Lead, 2014). In Germany, the vast majority of preschool teachers (educators) have completed a three year-post-secondary vocational training programme (ISCED level 4) and since 2003 a fast-growing number of higher education degree-level courses in early childhood pedagogy have become available. Currently, the proportion of the workforce with a college or university degree is still under 5 % (Bock-Famulla, K. & Lange, J., 2013; Autorengruppe Bildungsberichterstattung, 2012).

44. Qualification requirements for auxiliary staff are more varied across countries and in general lower. In England there are no formal requirements for professional preparation of assisting staff (Urban, Vandebroek, Lazzari, Van Laere, & Peeters, 2012). In Denmark there is no formal education requirement for educator assistants, but a secondary level vocational training (ISCED level 4) is offered in duration of 18 months; for the same position in French *école maternelle* ISCED level 4 certificate in early childhood studies is required (Naumann, et al., 2013). In ECEC centres in Japan employees in charge of 0 to 2 year olds must have a nursery teacher qualification and those in charge of 3 to 5 year-olds should have both a kindergarten teacher license and nursery teacher qualifications, but can work with just one or the other (Numano, 2010). The qualifications can be obtained on three different levels, as Junior College Associate Degree, Bachelor’s or Master’s degree (Numano, 2010). However, employees with different levels of qualification are treated similarly in terms of payment and work requirements (Numano, 2010). Child-minding staff requirements are even lower, and include a certificate with 120 hours of training (France), First Aid qualification (New Zealand), or only personal qualifications and previous experience (Denmark) (Naumann, et al., 2013; ECE Lead, 2014).

3.6. Curriculum

45. England and the educational sector in France have curricula with specifically defined learning areas and goals, as well as assessment requirements at the end of ECEC. New Zealand also

has a national curriculum with learning areas and goals, but with more of a guiding form where each setting is responsible for implementation and evaluation of its effectiveness, and no specific assessment of goal attainment is required. Germany, Denmark, Japan and the care sector in France provide general areas or guidelines for the development of curricula. In Germany it is up to each federal state to develop a curriculum, while in Denmark, Japan and France, it is up to each individual setting. Care and education settings in Japan have separate guidelines, while in Denmark, despite being a unitary system, each setting is obliged to provide separate curricula for children aged 0 to 2 and 3 to school starting age.

46. The '[Statutory Framework for Early Years Foundation Stage](#)' (EYFS) is the national curriculum and mandatory framework for ECEC in England for children between birth and compulsory schooling age. The Department of Education is responsible for the development and the implementation of the EYFS. In the year 2000, curricular guidance for the Foundation Stage was introduced. It was a statutory framework covering ECEC for children aged 3 to 5 years. In the year 2003, a non-statutory guidance for under-threes "Birth to Three Matters" was additionally implemented. These two frameworks were integrated in the year 2008, when the EYFS was taken into effect, and subsequently reformed in 2012. The newest version was published in 2014 and is effective as of 1st of September 2014. The main principles of the existing EYFS are retained throughout revisions, but made more concise, while partnerships between parents and professionals are strengthened and assessments of children simplified. EYFS has seven learning domains, three prime: communication and language, physical development, and personal, social and emotional development, and four specific areas: literacy, mathematics, understanding the world, and expressive arts and design (DfE, 2014a). Specific goals are defined in each of the areas and the children are assessed on their progress at age 2 and at before transitioning to compulsory schooling, resulting in each individual child's EYFS Profile, which is passed onto the parents and primary school teachers (DfE, 2014a). In addition to EYFS, there are non-statutory guidelines for practitioners and inspectors, titled '[Development Matters](#)' and '[Early Years Outcomes](#)', aiming at helping professionals implement the statutory guidelines of EYFS and at informing their understanding of child development and developmental outcomes through the early years.

47. Similar type of competency-based curriculum can be found in the current French *école maternelle* which stems from 2008. It lists five areas in which children are supposed to gain competence before transitioning to school: developing oral language and an introduction to writing; learning how to work together; acting and expressing emotions and thoughts with one's body; discovering the world; and imagining, feeling, and creating (OECD, 2004; Cochran, 2011). In the autumn of 2015, a new curriculum for preschools will be introduced focusing on language development; physical development; artistic development; critical thinking; and exploring the world. This new curriculum will have a stronger focus on the importance of play and learning through play than its 2008 version.

The Department of Education provided a guidebook for assessment of children in the last year of preschool which covers areas of language, math, and social and civic competences (Department of Education, 2010). Teachers are not required to conduct the assessment according to the guidebook, but they are required to produce an "acquisition report" for each child, which has to be shared with the parents of the child and can be used to smoothen the transition from preschool to primary school (Eurydice, 2014). The report usually includes information on how the child has developed and the most relevant information for the primary school to take into account regarding that child's particular development. Assessments can be included in the acquisition report as well. What is specifically included in the report differs between settings as the staff of preschools discuss and decide about the content of their preschool's report.

In the care sector, there is no national curriculum, but the regulation from 2000 emphasizes the responsibilities of institutions in terms of promoting well-being and development of children (Rayna, 2007; Vitali, 2007). Each institution is required to develop a particular educational plan specifying objectives and resources to be used in order to ensure care, development, early learning, well-being, and to account for individualized relationships and psychological, physiological and affective needs of

children (Vitali, 2007). The educational plan must include a ‘pedagogical project’, outlining the daily activities to be used to promote these objectives, and a ‘social project’, situating the facility in the local social and economic context (Vitali, 2007).

48. In New Zealand ECEC services are, since 1996, obliged to follow the curriculum *Te Whāriki*, which integrates principles for both care and education (New Zealand Ministry of Education, 1996). It was written in two languages, English and Māori, which provide complementary parts. It provides general instructions, but also specific instructions for distinctive contexts, including the Māori immersion and Pasefika programs, targeted at specific cultural groups with a goal of cultural preservation. The curriculum is based on principles of empowerment, holistic development, family and community and relationships with people, places and things. From the four principles, five strands are developed, each with distinctive goals, that guide the framework of the curriculum, and these are well-being, belonging, contribution, communication and exploration (New Zealand Ministry of Education, 1996). Each ECEC service is required to develop its own program, following the framework of the curriculum. How the curriculum is implemented depends on teachers, parents and *whānau*, the extended family that in Māori culture is considered to play a crucial role in a child’s life (Coalition of Child Care Advocates of BC, 2007). Evaluation and assessment of how well the programs implement the curriculum is also left to the services themselves, so the development of school readiness is less emphasized than in England or France.

49. In Germany, the responsibilities and duties of the ECEC settings have been changed and broadened over the last years. Between 2003 and 2007 official curricular guidelines were introduced in all 16 federal states of Germany. In particular, the promotion of cognitive and (pre)academic skills of children in preschools was emphasized, whereas before - following a socio-pedagogic tradition- the promotion of socio-emotional skills was prioritized. The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany adopted an agreement in 2004 that defined basic principles for the ECEC curriculums of all federal states. These basic principles include general assumptions about the view of the child, the role of teachers in ECEC and give examples of learning areas. The agreement has a stimulatory role, which means that the basic principles were meant to be further elaborated and adapted for the individual curricular frameworks of the federal states. All curricular frameworks define learning areas, but no learning goals. Emphasized learning areas differ between the curricular frameworks of the states. In general, the frameworks differ greatly between federal states. In addition, varying implementation strategies have been developed. No national inspection system or national curriculum exists. In most federal states the childcare providers are responsible for ensuring the quality of provision, and are free to choose how this is achieved. A number of quality management systems are run, including internal and external quality management systems. Denmark and Japan also have no legislated and required national curriculum. However, the Danish Daycare Act defines core areas of learning and development. Since 2004 each day care facility and all child-minders in Denmark must offer educational curriculums for age groups 0 to 2 and 3 to school age, separately. The curriculums need to address the following six topics: comprehensive personal development of the child, social competencies, language, body and motion, nature and natural phenomena, and cultural expressions and values (PLA Copenhagen, 2013). However, it is upon each individual centre to decide on exact goals and their implementation. In Japan, all kindergartens are required to organize their practice according to the ‘Course of Study for Kindergartens’, focusing on five areas: health (physical and mental), human relationships, environment, language and expression (feelings) (MEXT, 2008). Day nurseries have separate “Guidelines for Nursery Care at Day Nurseries”, listing seven topics to be addressed in development of curriculum: general provisions, child development, nursery education content, planning and evaluating care, health and safety, supporting parents and staff training (OECD, 2012). In ECEC centres, both guidelines should be followed. Both of these guidelines are flexible and emphasize providing an appropriate environment and support for children, centered on play, establishing a cooperative atmosphere between the teacher and the children and promoting cooperation with parents and the community (RCCADE, 2011).

3.7. Quality Assurance

50. Systems of educational quality assurance differ from country to country. External evaluation, with different focuses, is present in England, New Zealand, France and in the care sector of Japan's ECEC, while Germany, Denmark and education sector in Japan rely mainly on internal evaluation.

51. In England all registered ECEC services are obliged to follow the EYFS. The non-Ministerial Governmental Department Office for Standards in Education (Ofsted) - monitors ECEC providers (public provision, independent for-profit and non-profit provision and home-based childcare) to meet the statutory requirements on learning, assessment, qualifications, ratios and other criteria. Settings must be registered with Ofsted (except for most early years provision in schools) and inspected currently on a four yearly cycle (different for schools). Grades are awarded on a four-point scale ranging from outstanding (1) to inadequate (4) and published on the internet, constituting the sole test of quality (Mathers, Singler & Karemaker, 2012). Starting 2015, providers will be able to request and pay for an early re-inspection if they believe they have made improvements following a previous Ofsted judgement (DfE, 2013c). Local Authorities support the improvement of providers who are less than 'good' through a variety of training schemes. The Department for Education is responsible for policy and standards related with regulation and inspection of ECEC, ensuring that services are inclusive and quality assured (Lindeboom & Buiskool, 2013). New Zealand has a similar office, the Education Review Office (ERO), which is a government department independent of the Ministry of Education, in charge of evaluation of ECEC services, as well as schools. ERO reviews the institutions on average every three years. They emphasize gaining confidence and competence as learners and communicators, and having a sense of continuity, belonging, wellbeing and contribution as important outcomes of early childhood education for children, and believe that the services should be organized in a way that promotes these outcomes (ERO, 2004). Reviews are organized according to the five strands of *Te Whāriki*, but are not aimed at evaluating implementation of the curriculum itself. Institutions that are consistently performing well are reviewed less often, while the ones that perform poorly are visited more often. The reports for each institution are available to the public through ERO or the institution itself (ERO, 2014). The national agency *Protection maternelle et infantile* (PMI) is in charge of inspecting the childcare services in France, focusing on structural quality aspects, staff qualifications and parental involvement, while *école maternelle* is supervised by the *Inspecteurs de l'Education Nationale* (IEN), every three to four years and the focus of evaluation is on the teachers (Naumann, et al., 2013).

52. In Japan the curriculum implementation in kindergartens is monitored through self-assessment by staff and management every one to three years, with contributions from parents and local stakeholders (OECD, 2012). Day nurseries have a similar yearly self-assessment, with addition of external inspections every one to three years. Family day care services are not monitored, but local governments must provide support through consultations (OECD, 2012). In Germany and Denmark, the emphasis of the quality assurance strategies is on the quality of the institution, and not on monitoring learning achievements of children. In Denmark, local authorities are responsible for the supervision of ECEC provision. Parent involvement is emphasized and most institutions have parent boards, including two staff representatives and potentially other stakeholders, which set guidelines for educational principles, financial management and staff selection (Coalition of Child Care Advocates of BC, 2007). In Germany the specific strategies to assure and raise ECEC quality vary between the federal states.

4 Overview of pedagogical practices and approaches in place

53. This chapter gives an overview of pedagogical practices and approaches in place in England and the other selected countries. The underpinnings of the pedagogical practices and approaches (e.g. evidence-based, best practice, driven by theory) are explained whenever valid information was available. It is further highlighted if and how the pedagogical practices are aligned with primary schooling. The chapter is organized by research questions to facilitate the comparisons between countries.

4.1 What pedagogical approaches (e.g. teacher-directed, play-based) are practiced?

54. *Denmark* typically represents the pedagogical practices of Nordic countries. In Denmark ECEC services generally employ a holistic perspective, as opposed to an academic one. The holistic perspective emphasizes the promotion of all aspects of children's development including personality, health, social and emotional development. Introducing standards for learning as an objective is considered as too early in children's life, and sometimes even as unnecessary or potentially harmful, since it might limit the children's free development (Jensen, 2009). In addition, it is considered to go against the Nordic value of good childhood, based on the Convention on the rights of the child, which places emphasis on children having a voice in their own everyday life (Jensen, 2009). This is also emphasised in the Daycare Services Act, where children are considered as active participants in democracy contributing to the development of society and culture, and hence a large emphasis is put on the dialogue between adults and children in ECEC settings (Ministry of Family and Consumer Affairs (MFCA), 2007). Hence, day-care centres are shaped as democratic meeting places where the child has an active voice, which calls for pedagogical practices grounded in both dimensions, the caring dimension and the educational dimension (Jensen, Broström & Hansen, 2010). ECEC is designed to provide care and learning opportunities to each child based on his or hers individual needs, most commonly in a play-based child-centred environment (Winther-Lindqvist, 2013). Adult-initiated and adult-structured activities, in addition to lunch, snack and circle times usually take only about 30 minutes per day (Winther-Lindqvist, 2013). Recently there is a trend in building day-care centres that are workshop based, where children can choose in what type of activities they want to participate (Winther-Lindqvist, 2013). The legal provisions for compulsory one-year preschool class laid down in The Folkeskole (Consolidation) Act state that teaching on this level should, as far as possible, be given in form of play and other developing activities (Ministry of Education, 2003). According to Petersen (2011), most children spend about 7 to 8 hours a day in some sort of day-care facility in Denmark. The morning starts with a cosy breakfast and playing, followed by assembly (circle time). After that, children spend time in activities based in cultural, seasonal or pedagogical traditions, such as cutting and gluing holiday decorations for Christmas or Easter, until the collective lunch at noon (Petersen, 2011). This is followed by a three to four hours of playing outside, usually regardless of weather conditions. In the afternoon, children are provided with fruit and invited to play inside until they are picked up by their parents.

55. Due to the decentralised ECEC system in and the autonomy given to the communes and individual settings in *Germany*, there is a great variety of pedagogical approaches in place and it is difficult to describe the approaches for the whole country. However, Germany shares a lot of characteristics with the ECEC system of Denmark. The curricular frameworks of the federal states provide evidence of a holistic perspective on ECEC (Prott & Preissing, 2006). Most of the ECEC settings in Germany work according to the situation-oriented approach (Oertel, 1984). This approach is a child-centred approach which emphasizes that any learning in early childhood takes place in social situations, mainly based on children's play (Preissing, 2007; Zimmer, 2007). Thus, daily experiences and interests of children form the basis for any pedagogical strategy. The pedagogic principles stress

the objective of promoting children to become an active and responsible member of society. Many practitioners and parents in Germany held and hold the view that the promotion of socio-emotional skills is a more important aim of ECEC than the promotion of early academic skills (Tietze et al., 1998). Preschool groups in Germany are traditionally mixed-age groups sometimes covering the age span from one year of age until school enrolment. This typical composition of preschool groups aims at giving the children opportunities to learn from elder peers and – as an older child – to take responsibility for younger peers. However, the curricular frameworks of all federal states which have been implemented over the last years also stress and emphasize the importance of education in areas such as mathematics, literacy and science. Research shows that domain-specific promotion of early academic skills still takes place rarely in early years settings in Germany. Academic learning is not separated into sessions with specific subjects. But play-oriented activities take place which might contain learning across a range of subjects (e.g. Smidt, Lehl, Anders, Pohlmann-Rother & Kluczniok, 2012; Lehl, Smidt, Grosse & Richter, 2014)

56. In *England*, governmental initiatives since 1996 emphasized the need for raising academic standards in ECEC. The pedagogy of ECEC settings in England is often describes as a pre-primary approach where the focus lies in a formal approach developing children’s pre-academic skills. This entails more structured, often teacher-directed practice including performance assessments, increasingly prevalent with increasing age of children (Bennett, 2005; Apple, 2006; Alexander, 2010). A number of researchers reject this characterisation and stress that early childhood pedagogy in England is play-based with a balance between adult-led and child-initiated activities (Siraj-Blatchford & Sylva, 2004). The EYFS describes principles of learning in early childhood. The unique child is in the centre of early childhood pedagogy. It also underlines that children learn and develop in different ways and at different rates and all areas of learning and development are equally important. Furthermore effective learning is described as being characterised by playing and exploring, active learning and creating and thinking critically. Siraj-Blatchford (2008) pointed out that “the EYFS framework (DCSF, 2008) was organised around four broad principles: the unique child, positive relationships, enabling environments and learning and development with a focus on ‘the developing child’ at the centre of these relationships” (Siraj-Blatchford & Nah, 2014). Furthermore only 10 % of the learning goals are explicitly specified, the rest being more open for interpretation. According to this analysis free play and purposeful play as means to provide learning opportunities for a holistic development of children are as important pedagogical strategies as teacher-directed and more formal instructional techniques. The Researching Effective Pedagogy in the Early Years (REPEY) study (Siraj-Blatchford & Sylva, 2004) gives detailed insight and examples into implemented pedagogy in ECEC settings in England. It shows that pedagogical strategies change as the children grow older. Children approaching (primary) school enrolment age experience more staff-initiated episodes and spend most of their time in small groups.

57. The strict division between care and education systems in *France* is reflected in the pedagogical practices as well. Historically, the care sector (*crèches*) used to follow a maternal model, where the central goal was providing childcare and assistance to working mothers (Francis, 2007). Since 1960s there is also an emphasis on the educational part of childcare in this early period (Francis, 2007). Today, as the care sector is decentralized, pedagogical approaches of individual *crèches* differ from one another, but are based on the same official objectives of “well-being and harmonious development of children”, which differs profoundly from the academically oriented pedagogy of *école maternelle* (Francis, 2007). The term ‘pedagogy’ is rarely used in the care sector, as it is taken to imply school-type learning, and not child development; instead, preferred terms are ‘education’ and ‘psychopedagogy’ (Francis, 2007). Hence, ‘pedagogy’ is reserved for the education sector of *école maternelle*, which represents the first step towards school success, with a strong focus on early language and literacy skills (Moisset, 2007; Rayna, 2004). Individual classroom practices vary, but in general there is alternation between individual, small-group and whole class activities, as well as between teacher- and child-initiated activities (Francis, 2007). The activities are conducted according to a timetable set at the beginning of school year, corresponding to the five learning areas specified in the curriculum; other than that, there is time allocated for morning reception, meals, recess and rest (Francis, 2007). Play is not considered to be an integral part of learning and personal toys (albeit stuffed animals are allowed for very young children when needed) and other games are in general not

allowed in classrooms although there are areas for play with meaningful toys in each setting (Francis, 2007, Brougère, Guénif-Souilamas, & Rayna, 2008). About 30 minutes of recess time twice a day is the only time specified for free play specifically and it happens in the schoolyard (Brougère, et al., 2008; Cochran, 2011). Parents can be engaged in ECEC: in crèches a relationship between educators in crèches and parents should be established. In preschools (écoles maternelles) this is not compulsory although parents can have daily talks with teachers and there is a ‘conseil d’école’ in which parents can participate. At this conseil, parents can discuss with teachers and the municipality about preschool education and thus have a say in ECEC. French preschool is characterised as having a strong teacher-oriented focus (Cochran, 2011), although the new curriculum for preschools in France that will be implemented later this year (2015) will draw more attention to the topic of play and learning through play.

58. The government’s framework for education sector of ECEC in *Japan*, published by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2008 under its basic ideals specifies that pedagogy in kindergartens should be play-based, child-centred and child-initiated, relying on the idea that voluntary age-appropriate activities are essential for children’s development (MEXT, 2008). Similar framework is provided by the Ministry of Health, Welfare and Labour (MHWL) for the care sector, and it also gives a central role to play (Rayna, 2004). However, as the frameworks provide only a general outline, with broad instructions such as “playing outdoors willingly” and “thinking and acting independently”, the individual settings are free to approach the creation of individual curricular plans creatively, taking into account specific needs of the children (MEXT, 2008; OECD, 2012). The education and care sectors are separate in Japan, and both ministries in charge provide frameworks for pedagogical practices. However, the individual practices are left upon the institutions to decide on, and hence come in varying forms. There are three pedagogical approaches that can be commonly found in Japan: 1) ECEC focusing on development of within group human relationships, 2) ECEC focusing on pre-academic skill learning and 3) child-centred ECEC (RCCADE, 2011). What is common for all ECEC settings is the idea that the time spent there is supposed to teach the children how to live in the society. In the first type of ECEC (focusing on within group human relationships) the teachers organize the time for children into activity timeslots during which the children are free to play, but encouraged to do so in groups, relating to other children and developing social skills and group coherence. In the second type (focusing on pre-academic skills and learning) the time schedule is organized into group activities focused on learning language, mathematical and artistic skills. The children follow a predetermined time schedule and are not allowed to choose their own activities. In the third type of ECEC (child-centred), most of the time is spent in free play, with minimal direct instruction by the teacher. In today’s Japan, some ECEC settings are also developing pedagogy where these types are used in combination or eclectically blended (RCCADE, 2011). During application process, most kindergartens have open days (setsumeikai), where parents are welcome to visit the facilities and ask questions; effectively, they get a say in choosing between different ECEC types.

59. The New Zealand early childhood curriculum issued by the Ministry of education, called “Te Whariki” (“the mat”), is illustrated by the picture of a mat woven out of the four principles empowerment, holistic development, family and community, and relationships and the five strands well-being, belonging, contribution, communication and exploration, each of which contains certain goals for children’s learning (New Zealand Ministry of Education, 1996). It puts a strong emphasis on play-based learning. Children’s learning through following their own interests has become more important with the introduction of Te Whariki. Children are regarded as individual learners bringing their own interests, skills, and experiences to the early childhood setting. Therefore, the curriculum outlines the importance of spontaneous play and active exploration, as well as of collaboration with peers, adults, places, and things through guided participation, observation of others, individual exploration, and reflection. It highlights the relevance of socially and culturally mediated learning as well as of reciprocal and responsive relationships. The Te Whariki curriculum also attends to the diversity of ECED in New Zealand by integrating different programmes, philosophies, structures, and environments (New Zealand Ministry of Education, 1996).

60. In a study examining the New Zealand teachers' understandings of learning in relation with the Te Whariki curriculum, the teachers described both traditional teaching approaches as well as some "new approaches to teaching and learning", which the interpreted as "a significant shift towards socio-cultural lens of learning" (Alvestad, Duncan, & Berge, 2009).

4.2 Are there any philosophical approaches being dominant in early childhood pedagogy in the considered countries?

61. The Danish ECEC system emphasizes the socio-pedagogic tradition and a child-centred approach without stressing the role of one particular philosophical approach being dominant. The socio-pedagogic approach in *Denmark* relies on the importance of dialogue between adults and children, as well as creative activities with discussions and reflections (OECD, 2012).

62. In *Germany*, different philosophical roots can be identified to be influential for ECEC pedagogy as described in the different curricular frameworks. The situation-oriented approach which goes back to ideas of Freire, Robinson, Zimmer and others is the main pedagogical approach guiding work with children in German ECEC settings. But this approach is combined with ideas, views and practices of other approaches such as Humboldt, Fröbel, Montessori and Piaget.

63. According to Siraj-Blachford & Nah (2014) in *England* the play-based approach, with individualized learning and integrated activities, put forward by the EYFS statutory framework as the guiding pedagogy for early childhood education, is based on child-centred and constructivist perspectives, while the encouraged practices of sustained shared thinking and adult-led activities find roots in Vygotsky's sociocultural constructivism (Siraj-Blachford & Manni, 2008). "The notion of scaffolding as a pedagogical intervention with instructive play that encourages the child's co-construction in learning and teaching is also considered important. Thus, 'there is no one effective pedagogy', but different pedagogical practices which are sensitive to the curriculum concept being discussed" (Siraj-Blachford & Nah, 2014).

64. For their ECEC system, *France* has clearly adopted a split approach to early childhood reception structures on the one hand, and the educational approach of the école maternelle on the other hand. Educational principles in the école maternelle draw on school-type pedagogy and its roots (Garnier, 2011).

65. ECEC in *Japan* is guided by the 'free child care and education' or the 'guiding child care theory', which emphasizes that children learn best when feeling free and supported by the teacher in a sympathetic way while interacting with their environment and gradually building close relationships with peers (RCCADE, 2011). The actual interaction with children is often based on the 'theory of three activities in preschool', which specifies three layers of activities, all arising from children's play; firstly, the 'life that serves as the base', comprised of free play and guidance aimed at developing daily life skills, secondly, the 'central activity', where elements are extracted from child's play and re-constructed to be educational, for example, in a cultural sense, and finally, the 'systematized learning activities', which aim at directly teaching linguistic, mathematical or artistic concepts and skills. The three above specified forms of ECEC have developed selectively drawing influences from several philosophical approaches, including Montessori, Reggio Emilia and Developmentally Appropriate Practice and applying them in a flexible manner, tuning them to the needs of individual children.

66. *New Zealand's* "Te Whariki" curriculum provides a framework for all early childhood services, at the same time allowing for a certain degree of autonomy for individual implementations by the different early childhood services. That way, different patterns in the "whariki" can evolve and might stem- amongst others- from "philosophical emphases, such as in Playcentre, Montessori, or Rudolf Steiner programmes" (New Zealand Ministry of Education, 1996, p. 19).

4.3 How does the curriculum predetermine pedagogical practices and approaches?

67. In *Denmark*, the Act on Educational Curricula introduced in 2004 the guidelines for all day-care facilities for developing their individual curricula for children aged 0-2 and 3-school age. These are also outlined in the Daycare Services Act (MFCA, 2007). It is the task of the manager of the day-care facility to prepare and publish the curriculum, and to have it evaluated on a yearly basis. The curriculum needs to provide objectives for children's learning, focusing on six themes: comprehensive personal development, social competencies, language development, body and motion, nature and natural phenomena, and cultural values and artistic expression. Challenges related to implementing the six themes in the curriculum are the tendency to narrow the objectives so that basic skills are taught mechanically, while downgrading the care component to safekeeping of children, instead of creating a cooperative relationship between the pedagogues and children (Jensen, et al. 2010). To promote language education, the Daycare Services Act also provides regulations for obligatory language assessment and stimulation (MFCA, 2007). All children at the age of three are offered a language assessment test, and, if deemed necessary, other assistance and supporting activities for language development both at home, in cooperation with parents, and in day-care centres (Jensen, et al., 2010). This policy leads to stronger emphasis on the curriculum and the teaching methods focused on language development, which contributes to narrowing the goals and objectives of ECEC (Jensen, et al., 2010). In general, Jensen et al. (2010) state that policies in Denmark, similarly to many other European countries, while not strictly formulating what should be done in day-care facilities, still create a trend towards more formal, teacher-directed practice, through increased use of standardized manuals and narrow short-term indicators of achievement, wider variety of evaluation methods and implementation of quality assurance mechanisms. They caution that over-specification of goals and objectives might lead to ECEC becoming "narrow and lifeless" (Jensen, et al., 2010). Another indicator that ECEC in Denmark might be becoming more oriented towards an academic approach is the transfer of the responsibility for the ECEC system from the Ministry of Social Affairs to the Ministry of Education in 2010 (Winther-Lindqvist, 2013).

68. In *Germany*, the Federal Government has a stimulatory role and may introduce legislation which is then transformed into independent laws at the regional level. Thus, each federal state (Bundesland) has its own curriculum. No national curriculum exists. The Child and Youth Welfare Act (1990/1991) provided only a general definition of curricular goals for children's and youth services: promoting children in their individual and social development. The publication of international comparative school achievement studies like PISA 2000 (OECD, 2001) had high impact on the further development of the ECEC system in Germany. The results of the studies had shown that German students scored much lower in the achievement tests than being expected and hoped. Furthermore, it was highlighted that the cultural and social origin of students is stronger associated to their achievements and school careers than in many other countries. These results have been highly debated and as a consequence, higher attention was drawn on the potential benefits of early childhood education and care systems. Following a socio-pedagogical tradition preschools in Germany focused on promoting children's socio-emotional development whereas the promotion of early academic skills received much less attention. This was meant to be changed through the development of ECEC curricular frameworks. Between 2003 and 2007 all federal states (Länder) issued early childhood curricula which serve as frameworks and guidelines for early childhood practice. But: no inspection system and no national curriculum exist. Possible educational areas are language, communication, personal, social development, ethics, religion, mathematics, science, technology, arts, music, media, body, health, exercise, nature and cultural environments. Different curricula differ markedly in terms of length, emphasis of different educational areas, link to primary school and control of implementation. But some core ideas are shared. The aim of preschool is to strengthen basic competencies, skills and personal resources. A holistic educational approach is shared. The curricular frameworks describe broad educational areas but no qualification levels. The strong role of the situational approach in German preschool pedagogy is apparent. The child is seen as an active and competent individual. Education takes place in a social context. Any pedagogical interaction should draw on children's questions and interests, play-based approaches are underlined. The role of the

preschool teacher is to expand and deepen children's interests, to provide attachment and autonomy and to promote opportunities for children's self-production and world-approbation. The level of control of implementation is low with variation between federal states. Thus, the curricular frameworks do not strongly predetermine pedagogy but shared pedagogical values such as the view of the child are part of the curricular frameworks.

69. In *England*, the Early Years Foundation Stage (EYFS) was introduced initially in 2007, with subsequent changes in 2008 and 2012. The newest version was published in 2014 and is effective as of 1st of September 2014. The initial version, which specified six areas of learning and 69 learning goals was generally well received by practitioners who claimed that it validated their personal beliefs and practices, and allowed for early ages to be seen as a separate and important developmental period, in contrast to a preparatory school phase (Brooker et al., 2010). The changes in 2012, however, included reorganisation of learning and development areas into two groups: three prime and four specific areas, where specific areas were shaped to form the baseline for the National Curriculum (DfE, 2012). The newest version preserves this organization, and promotes teaching and learning that ensures 'school readiness' and provides children with a foundation for good future progress in school and life (DfE, 2014a).

70. The four guiding principles of EYFS emphasize that every child is unique and learns strength and independence through positive relationships in enabling environments where their individual differences in way and rates of learning are addressed through cooperative efforts of practitioners and parents (DfE, 2014a). The three prime, general learning and development areas, aimed at developing children's curiosity and desire to learn, are communication and language, physical development, and personal, social and emotional development. The four specific areas, serving to apply and strengthen the three prime areas, are literacy, mathematics, understanding the world, and expressive arts and design. It is required from practitioners to focus mainly on the three prime areas while working with youngest children, shifting focus more towards the specific areas as the children gain confidence in the prime areas. It is directly stated that these areas must be implemented through "planned, purposeful play and through a mix of adult-led and child-initiated activity", applying their own judgement about the balance between the two (DfE, 2014a). This balance is expected to shift towards more adult-led activities as children approach primary school, which is supposed to prepare them for formal learning. Each child is assigned a key person, who ensures that individual needs of the child are met and provides support for parents to guide the child's development at home. In addition to the areas and goals, assessment is considered an integral part of learning and development and is envisioned as an ongoing process done through continuous observation of children, which does not involve excessive paperwork or long breaks from direct interaction. Between ages two and three, practitioners are required to provide parents with a short summary report of their child's development, identifying any areas of potential concern and describing plans to address them. This constitutes the obligatory progress check. The main assessment component is the EYFS Profile that has to be completed for each individual child at the end of the final term when the child reaches the age of five. The Profile is shared with the parents, Year 1 teachers and, upon request, the local authorities.

71. Welfare and safety requirements laid down by the EYFS framework instruct the providers to pay attention to each child individually and communicate with the parents about the specific needs of the child. Due to the fact that pedagogical principles (such as assessing children in their outcomes) are part of the curriculum and obligatory at the same time, the EYFS framework has stronger impact on early childhood pedagogy in England compared to countries like Denmark and Germany.

72. There is no national curriculum in *France* for the care sector, but the regulation from 2000 emphasizes the responsibilities of institutions to promote well-being and development of children (Rayna, 2007; Vitali, 2007). Each institution is required to develop an individual educational plan specifying objectives and resources to be used in order to ensure care, development, early learning, well-being, and to account for individualized relationships and psychological, physiological and affective needs of children (Vitali, 2007). The educational plan must include a 'pedagogical project', outlining the daily activities to be used to promote these objectives, and a 'social project', situating the

facility in the local social and economic context (Vitali, 2007). However, it is not explicitly stated what kind of activities the ‘pedagogical project’ should be comprised of and if play should be a part of it (Rayna, 2007).

73. With regard to the education sector, the main goals are considered to be schooling, socializing, and learning and practicing since 1986. Both *école maternelle* as well as elementary school are organized according to these values. The child is regarded to be ‘the heart of the educational system’ (Vitali, 2007). All *écoles maternelles* follow the same competency-based curriculum which builds on these values, and lists five areas in which children are supposed to gain competence before transitioning to school (Cochran, 2011). The five areas are: developing oral language and an introduction to writing; learning how to work together; acting and expressing emotions and thoughts with one’s body; discovering the world; and imagining, feeling, and creating (OECD, 2004). Teachers are expected to use these areas as the framework for developing their practices, while focusing on the individual child’s progress and needs (Vitali, 2007). The curriculum builds up on these domains, and heavily emphasizes language development as the crucial goal of *école maternelle*, with the need of developing competences in communication, action description, and evocative language and writing, while specifying that the child should follow its ‘own way, its acquisitions through play, action, autonomous research and sensory experience’ (Cochran, 2011; Vitali, 2007). Assessments of competencies are conducted through use of tools developed by the Ministry of Education. Assessments take place while children attend *école maternelle* to identify specific needs for specific children. At the end of *école maternelle* a broad evaluation of children’s skills takes place. The following areas are covered in the assessment: language, math, space and time, writing and gross motor development (OECD, 2004). The curriculum and the support of the Ministry are designed in a way that it may direct pedagogy in preschool settings strongly compared to other countries

74. The Course of Study for Kindergartens in *Japan* (MEXT, 2008) provides a framework for the formation of individual kindergarten curricula, consisting of three parts. The first part states that each kindergarten must develop a curriculum specifying the aims and the content of education. The curriculum needs to take into account the age of the children, individual experiences of children and their developmental process. It also specifies that kindergarten education should be provided at least 39 weeks per year and in general four hours per day. The curriculum needs to address five learning areas: health (physical and mental), human relationships, environment, language and expression (feelings). The second part of the framework provides specific aims in each of these areas (e.g. human relationships – “to acquire socially desirable habits and attitudes”), the content planned activities should aim to promote (e.g. environment – “leading a life close to nature, being aware of its grandeur, beauty and wonder”). In addition, direct instructions are given to the teachers specifying instructional strategies and pedagogy (e.g. health – “Teachers should encourage children to move their whole bodies in order to develop a sense of joy in this activity, an awareness of safety, and a desire to maintain their health, through various kinds of play in accordance with children’s interests, curiosity and abilities”) (MEXT, 2008). The third part describes factors which should be taken in consideration when developing the learning plan, calling for age-appropriate, child-centred and child-initiated pedagogy, as well as appropriate evaluation and continuous improvements of the educational plan (MEXT, 2008; OECD, 2012). The Ministry of Health, Labour and Welfare’s National Curriculum of Day Care Centres is organized around the same five areas, and provides a framework for the development of curricula in the care sector, which need to address seven topics: general provision, child development, nursery education content, planning and evaluating care, health and safety as well as supporting parents and staff training (OECD, 2012). With respect to pedagogical approaches, play is given the highest priority in care settings (Rayna, 2004). This parallel organization of the otherwise split-system of care and education allows for easier transition between different types of settings (OECD, 2012). The organization of curriculum has moderate potential to affect pedagogy in preschool settings. On the one hand it gives decision-autonomy to the kindergartens and daycare centres. On the other hand, the framework gives direct instructions with regard to pedagogical approaches.

75. *New Zealand’s* “Te Whariki” curriculum covers the age range from birth until school entry. It uses the metaphor of a mat, woven out of four principles (Empowerment, Holistic Development,

Family and Community, and Relationships) and five strands (Well-being, Belonging, Contribution, Communication and Exploration) each of which contains specific goals for children's learning. The curriculum has a strong emphasis on reciprocal relationships and well-being and highlights the critical role of cultural diversity, while still keeping its focus on the children's learning. It ensures age-appropriateness by defining three different age-groups (infants: birth to eighteen months, toddlers: one to three years, and young children: two-and-a-half years to school entry age) and determining key curriculum requirements for each age category. Key curriculum requirements for infants include one-to-one responsive interactions with caregivers following the child's lead), higher staffing ratios than for older children, individualised programmes that can adjust to the infant's own rhythms, partnership between parents and the other adults involved in caring for the infant. Requirements stated for toddlers comprise opportunities for independent exploration and movement, a flexible approach which can accommodate their spontaneity, responsive and predictable adults accepting the toddler's developmental swings and encouraging their cognitive skills and language development. For young children, the curriculum emphasises the importance of adults and environments to provide resources, challenges, and support for their widening interests and problem-solving capacities, opportunities for unfamiliar routines, new and self-directed challenges, co-operative ventures, and sustained projects (New Zealand Ministry of Education, 1996). While the frame conditions and goals are clearly phrased, the curriculum leaves a high degree of autonomy to the early childhood service centres considering the implementation, provided that each realisation offers "sufficient learning experiences for the children to ensure that the curriculum goals are realised." (New Zealand Ministry of Education, 1996). Te Whariki itself is not explicitly based on a particular pedagogical theory, though it is guided by the ideas of Piaget, Erikson, Vygotsky and Bruner (Carr & May, 1991, as cited in Alvestad, et al., 2009). However, using different "philosophical emphases, such as in in Playcentre, Montessori, or Rudolf Steiner programmes", together with variations in cultural, structural and organizational aspects of curriculum implementation, can lead to different patterns in the "whariki" (New Zealand Ministry of Education, 1996).

4.4 How does regulation determine early childhood pedagogy?

76. In this section for each of the considered countries selected aspects of regulation are highlighted that impact the practiced early childhood pedagogy.

77. Compared to other countries, the *Danish* legislation explicitly emphasizes the issue of social inequality, stating as one of the aims of Day-Care Facilities Act the prevention of "the vicious circle of deprivation and exclusion by making pedagogic measures an integral part of both the local authority's overall, general offer to children and young people and the preventive and supportive activities aimed at children and young people requiring special support, including children and young people with diminished mental or physical capacity" (Jensen, 2009; MFCA, 2007, Part 1, Section 1, Subsection 3). However, the local authority must guarantee each child a place within their own municipality. This often results in children from the same neighbourhoods attending the same centre. This is a challenge with regard to promote social equality and also impacts the pedagogical approaches because the proportion of socially disadvantaged children determines the balance between general and social pedagogical practices in a given centre. But centres with more socially disadvantaged children often do not receive special support for implementation of social pedagogy (Petersen, 2011).

78. Federalism and subsidiarity underlie as political principles the regulation of ECEC in *Germany*. Three levels of policy can be distinguished: the federal, the Länder (federal states) and the municipalities. The municipalities are in charge of planning and ensuring the provision of ECEC services. But they need to consider the principle of subsidiarity which means that societal tasks should be undertaken by the smallest possible unit. As a consequence, municipalities do not provide ECEC services as long as private organisations (such as non-profit organizations and churches) provide enough places. This principle endorses the provision of children's services by numerous small, non-

statutory, non-profit providers. High diversity in pedagogical approaches is supported. Furthermore the churches provide a great proportion of services. Thus the influence of religious organizations also on pedagogy is relatively high.

79. In *England*, the opposite is the case. The central organization and regulation accompanied with specific learning goals and inspections impact pedagogical approaches and serves to reduce variation between individual settings.

80. Looking at the ECEC system in *France*, the alignment with formal schooling is a striking regulatory characteristic which has clear implications for early childhood pedagogy. The Law of Education from 1989 puts both *école maternelle* and elementary (primary) school under the umbrella of primary school, specifying that an educational institution should include both (Rayna, 2007), although, according to a law which was revised in 2013, *école maternelle* should be regarded as a specific (separate) cycle of education. Because preschool in France is regarded as a separate cycle, a separate part, from primary schooling since 2013, this opens a route to a more differentiated pedagogy. As a result, a revised curriculum for the *école maternelle* as a separate cycle from primary education will be introduced in autumn 2015: ‘L’*école maternelle* : un cycle unique, fondamental pour la réussite de tous’ While the current preschool curriculum led to little differentiation in appropriate pedagogy between preschool and primary school, the new curriculum (in line with the 2013 law) is expected to put more emphasis on the differentiated character of preschool and focus more on play-based learning.

81. In *Japan*, the Course of Study for Kindergartens and the National Curriculum of Day Care Centres not only specify the content of early childhood education, but also provide specific standards for buildings, facilities and materials to be used which are strictly observed in licensed ECEC settings; unlicensed settings can be more lenient in applying these standards (OECD, 2012; RCCADE, 2011).

82. The Education (Early Childhood Services) Regulations 2008 (New Zealand Legislation, 2008) regulates general conditions of early childhood education in *New Zealand*, as for example teacher-to-child ratios, teacher qualifications, and activity spaces. For example, the teacher-to-child ratio at all-day services is 5:1 (maximum) for children that are under two years old. For children over two years of age, the maximum child-to-staff-ratio is 10:1. Regarding the qualification requirements the responsible staff member must hold a recognised qualification. Activity spaces in early childhood education and care centres must be at least 2.5 sq m per child (indoor). While those general additions are clearly regulated, methods or strategies included are not prescribed in the document. According to Alvestad et al. (2009), “Te Whāriki differs from other curricula in that it does not prescribe content or methods, but leaves it to the teachers to weave their own ‘Whāriki’ (mat).” Te Whāriki Curriculum states that “the way in which each early child-hood service implements curriculum will vary”. Each service will develop its own program to meet the needs of its children, their families, the specific setting, and the local community. Programs will be based on the curriculum principles and be planned and evaluated in terms of the curriculum’s strands and goals” (New Zealand Ministry of Education, 1996, p. 27).

4.5 How does the system of quality assurance and development determine early childhood pedagogy?

83. In *Denmark*, the system of quality assurance focuses on the quality of the facility’s physical, mental and aesthetic child environment and it is up to the manager, in cooperation with the parent board, to assess the environment from a child-centred perspective (MFCA, 2007). Another form of quality assurance is the educational and psychological counselling for pedagogues, provided by the municipality, which serves as a medium of communication between the political system and the centres, and allows for spreading ‘best practice’ and ensuring similar standards for centres around the

country (Jensen, et al., 2010). In *Germany*, the preschool settings need to keep mainly structural quality standards (e.g. child/staff ratio, formal qualification level of preschool teachers) which are regulated by laws at the level of the federal states. As described above, the curricular frameworks also refer to pedagogy. But the implementation of the curricular frameworks is not monitored and no central inspection system exists. Most of the federal states rely on internal quality management and evaluation systems, which are carried out by the preschool centres and funding organizations. To date, only one federal state (Berlin) has implemented an obligatory external evaluation of quality which also regards curriculum and pedagogy.

84. In *England*, the Early Years Foundation Stage is directive for the inspections carried out by Ofsted or inspectorates of independent schools. The quality of the settings and the standards of provision are reported (DfE, 2014a). As the EYFS also refers to pedagogy (see above), the quality inspection system has clear impact on pedagogy. In *France*, the regional education offices oversee the pedagogical practices of individual teachers in both *école maternelle* and primary schools through direct inspection, conducted at the beginning of their working career and repeated on average every four to five years (Rayna, 2007). These observations are accompanied by interviews with teachers which provide a platform for discussion about individual pedagogical approaches and for provision of support and guidance for teachers (Moreau & Rayna, 2007). In addition the teaching and administrative staff of each *école maternelle* produces an annual school project that is intended to guide educational activities (OECD, 2004). *Japan* uses a supervisor system to maintain and develop quality in public and private kindergartens. Supervisors observe pedagogical practice and provide guidance on how care and education should be carried out (RCCADE, 2011). Most supervisors are kindergarten teachers themselves. Facilities also mostly conduct meetings and briefings where entire staff observes and discusses practice of one teacher, sometimes using video recordings (RCCADE, 2011).

85. In *New Zealand*, the Education Review Office (ERO) is a designated government department in charge of evaluating and reporting on the education and care of students in schools and early childhood services (ERO-Website, accessed September 1, 2014). It carries out several different types of reviews and evaluations, as for example education reviews, home-school reviews, cluster reviews of education institutions and services, contract evaluations and national evaluations on education topics. According to the ERO-Website, “schools and early childhood services are reviewed on average once every three years. Reviews will be more frequent where the performance of a school or centre is poor and there are risks to the education and safety of the students, or less frequent where a school has a stable reporting history and demonstrates good self-review processes and use of its assessment information. ERO’s reports on individual schools and early childhood services are freely available to the public”. ERO’s reports are used by parents, teachers, early childhood education managers, and by government policy makers. The education reviews focus on student learning and the ways in which school policies, programmes, processes and practices contribute to student engagement, progress and achievement. ERO also gives recommendations on how to improve certain aspects of early childhood education, e.g. indicators of good practice (New Zealand Education Review Office, 2010, 2013).

4.6 How does teacher qualification determine early childhood pedagogy?

86. In *Denmark*, training programs of pedagogues focus on general pedagogy as understood by a child-centred view on preschool education. General pedagogy includes here playing, learning and socializing. The demands of social pedagogy are mostly put upon the pedagogues when they start their job (Petersen, 2011).

87. In *Germany*, the training at vocational schools qualifies for a broad spectrum of work within the sector of youth welfare (not necessarily early childhood education). The curriculum of the training at vocational schools refers to shared principles of early childhood education as proposed by the

Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK, 2010). Thus, in terms of pedagogy co-constructive, child-centred and play-based approaches are promoted. The view on appropriate pedagogy for primary school teachers is different, and as the training of primary school teachers takes place at universities, and the training of preschool teachers still mainly at vocational schools, this means that pedagogical practices in preschool and primary schools are not aligned. Some federal states decided on moving the school enrolment age to 5 years. On the other hand, research shows that children who were enrolled very young into primary school show less successful school careers in Germany (Hagemeister, 2009). With regard to these findings better alignment of preschool and primary school pedagogy is debated (e.g. Bayerisches Sozialministerium für Arbeit und Sozialverantwortung, Familie und Frauen, 2012).

88. In *England*, the principals of the Early Years Foundation Stage are also the principles for qualifying early years professionals. To raise qualification standards in ECEC in England, in 2007 the early years professional programme was introduced, aiming at staffing all early years children's centres in England with at least one professional with the status of early years professional by 2010. The status is broadly equivalent to qualified teacher status. Following up on the early year professional status programme the early years teacher programmes were introduced in 2013 (DfE, 2013a). They are meant to be specialists in early child development and trained to work with children starting from birth. The government aims at matching the teaching standards for early years professionals with teaching standards for classroom teachers. Furthermore, the government aims at placing more school teachers in preschool settings. The number of pedagogical staff with high formal qualifications is relatively high in England, so one might expect better prerequisites to implement demanding pedagogical strategies compared to many other countries. The recent strategy to align qualifications of early years teachers and school teachers and to place school teachers in early years settings may lead to more aligned pedagogical practices of preschool settings and school settings.

89. In *France*, the division between care and education is also reflected in teacher qualifications. In the care sector, the staff typically has training as paediatric nurse, nursing assistant, early childhood educator, paediatrician or psychologist. The qualification profiles reflect the orientation of the care sector towards promoting health and well-being of children (Rayna, 2004). For teachers in école maternelle a five-year university training is required. The study programme qualifies to work in école maternelle as well as in elementary school. As a consequence, with regard to pedagogy teachers share the same training experiences. Concerns have been raised as the teachers in école maternelle are not specifically trained for working with very young children (Cochran, 2011; Rayna, 2004). As a result, a qualification for 'nursery school specialist' is being created. This is an additional training programme for 'maîtres-formateurs' and they are required to take an exam, the CAFIPEMF ('certificat d'aptitude aux fonctions d'instituteur, professeur d'école, maître-formateur') during which they have to demonstrate their teaching and instruction skills. In addition, they will be in charge of training new teachers working with very young children in preschools to provide them with more development- and age-appropriate skills to work in preschools.

90. In *Japan*, the care and education sector have the same requirements for teachers (ISCED level 5). In order to promote co-operation between the facilities most of the college credits are aligned, and teachers are encouraged to obtain both qualifications, which about 80% of them do (OECD, 2012). In private institutions the qualification requirements are somewhat more lenient, compared to public ones, so there is more variety in degrees of staff training (RCCADE, 2011). Teacher training schools, including universities, junior colleges and vocational schools, besides providing teaching skills, also focus on developing practical methodologies to be used in ECEC settings (RCCADE, 2011). This practice of qualifying staff seems to make sure that also teachers working with very young children under the age of the three years are trained in pedagogy and pedagogical practices of ISCED 0.1 and 0.2 are more aligned than in other countries.

91. In *New Zealand*, the benchmark qualification for qualified early childhood teachers is a Bachelor of Teaching (Early Childhood Education) or Diploma of Teaching (Early Childhood Education), or an equivalent Level 7 qualification approved by the New Zealand Teachers Council for registration (TeachNZ, 2014). New Zealand has different kinds of kindergartens which require

different kinds of qualifications. Sessional kindergartens employ only qualified and registered teachers (TeachNZ, 2014). In order to study early childhood education at a university, University Entrance (UE) is the minimum requirement. Apart from that the New Zealand Teachers Council also requires candidates to demonstrate that they are “of sound character and fit to be a teacher” and underlines the importance of personal qualities, communication skills and background experiences (TeachNZ, 2014).

4.7 Is early childhood pedagogy aligned with formal schooling?

92. Legislatively, both daycare services and public schools are focused on the well-being of children in *Denmark* and clearly emphasize the democratic aspect which should be present in everyday practices (Jensen, et al., 2010). Easing the transition between institutions is one of the purposes of the Daycare Services Act (MFCA, 2007). To achieve this, daycare facilities are required to cooperate with parents and local schools in nurturing children’s basic competences and a general motivation for learning. Since 2008, previously optional one year of pre-school class (level 0) is now compulsory for Danish children aged 6. The teaching on this level is based on play and serves for children to get insights into daily routines of school life. In 2013 the Danish Evaluation Institute developed a dialogue tool “Working Together for a Good Start in School”, which is designed to be used by pedagogues from daycare and after-school centres, pre-school class managers and first-grade teachers from local institutions in small discussion groups, with a goal of achieving a smooth transition from ECEC to primary school that provides children with continuity, while still allowing for differentiation between the settings and the expectations associated with them (EVA, 2013).

93. In *Germany*, early childhood pedagogy is not aligned with schooling. This is due to the structure and auspices (see above) as well as different qualification profiles for professionals working in preschool centres and professionals working in formal schools. However, the ease of transition between preschool and primary school is an important topic of public, scientific and political debate. The curricular frameworks for ECEC in all federal states of Germany define the preparation of school enrolment as learning area or educational goal. Furthermore the preschool centres are asked to establish good practice of collaboration with primary schools in the neighbourhood (e.g. via visits of school libraries etc.). Some federal states also engage for better alignment. Baden-Württemberg for example implemented an educational plan which is valid for all educational institutions serving children from age 0 until age 10, in Lower Saxony, efforts have been made to develop study programmes that qualify for teaching in preschool as well as in primary school. However, at the same time, preschool and primary school are still considered two different worlds in Germany, also and especially with regard to pedagogy.

94. In *England*, the changes in EYFS in 2012 included reshaping the learning areas and goals to, where possible, form the appropriate baseline for the National Curriculum (DfE, 2012). These changes are preserved in the newest (2014) version of EYFS which directly specifies 17 early learning goals in the above-mentioned seven learning areas. The realization of these goals is assessed in the EYFS Profile of each child. The early years practitioners are asked to indicate if the child is meeting the expected levels of development, exceeding them or not yet reaching them, as well as to describe child’s abilities in relation to the three prime learning areas. The Profile is given to the child’s Year 1 teacher to allow for tailoring of activities according to the child’s individual needs.

95. The *école maternelle* and elementary schools in *France* share the same principles, opening hours and administration; they are often located in the same building or in buildings adjacent to each other (OECD, 2004). The *école maternelle*, despite not being compulsory, has close links with the primary school curriculum and is largely education-based. This is reflected in the linking of the two curricula, which occurred in 1995 (Francis, 2007; OECD, 2004). The latest version of the preschool curriculum (to be implemented in autumn 2015) remains closely linked to the primary school curriculum but the specificity of preschool education is more clearly explained in the preschool

curriculum, with greater attention to what sets preschool aside from primary school and greater attention to the role of play in early development. In France, the similar training requirements for teachers in preschools and primary schools exhibit another link between pre- and primary school (Francis, 2007). The teachers and administrators from two schools also meet regularly to discuss children's learning and identify difficulties, so that the transition from one stage to another would be smoother (OECD, 2004). In general, it can be said that early childhood pedagogy and formal schooling in France are closely aligned although the 2015 revised preschool curriculum will set out the differences between the two more clearly than earlier curricula have done. ECEC and formal schooling seem to be split systems in Japan, so little indications for alignment could be found.

96. New Zealand's ECE curriculum is well aligned with primary schooling. Taguma, Litjens, & Makowiecki (2012) describe explicit links of Te Whariki to the New Zealand Curriculum Framework for schools (Ministry of Education, 1993, 2007). "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." (Taguma et al., 2012). The early childhood curriculum Te Whariki provides a foundation for children to become confident and competent and acquire basic skills that are essential for later schooling (e.g. working cooperatively, have language skills for a range of purposes, understand basic concepts about rules, rights, and fairness), and thus, during the school years, to be able to build on their previous learning. Each strand of the early childhood curriculum has a number of links with the essential learning areas and essential skills of The New Zealand Curriculum Framework (Ministry of Education, 1996). The five development strands are aligned with necessary skills and experiences for primary school and the curriculum describes how staff can implement certain activities to help facilitate and smoothen the transition to school (Ministry of Education, 1996).

5 Research evidence

97. Chapter 5 summarizes the research evidence on the effects of different pedagogical practices and approaches on the quality of ECEC, and children's early and later development. The arguments for and against the use of different pedagogical are discussed. The examination of the literature showed that research evidence is in general weak and that there is a lack of robust evaluation studies with regard to the effects of different pedagogical practices. The evaluation of the research and literature is further complicated by the fact that the term pedagogy is often not used in coherent ways. The research evidence will be organized here by core research questions and topics. These questions guided different studies in different areas of the world. The first research question relates to the effects of developmentally appropriate practice. The second research question investigates whether alternative pedagogical co-constructive approaches such as Montessori, Steiner or Freinet have specific effects on children's development. Third, studies will be reviewed that look at effects of specific pedagogical strategies on quality and children's development. It will be explained in detail how teacher-directed and child-centred approaches relate to children's learning and development in different areas. Fourth, findings on the effects of different types of play in early childhood practice will be presented. Finally, research evidence on the effects of specific pedagogical approaches for children at risk / disadvantaged children will be summarized briefly.

5.1 Research evidence on the effects of developmental appropriate practice

DAP are teaching practices with the stated goals of creating a community of learners, enhancing development and learning, constructing appropriate curriculum, assessing children’s learning, and establishing relations between schools and families. DAP is seen as a framework that supports a child-centred approach which also stresses heavily the importance of scaffolding. DAP seem to be especially beneficial for students’ motivation and emotional development. In the long run positive effects are reported for learning dispositions and attitudes, but not for academic skills.

98. In the *United States*, appropriate early childhood pedagogy is commonly discussed and researched with regard to the National Association of Young Children’s guidelines on Developmentally Appropriate Practices (DAP). DAP are teaching practices with the stated goals of creating a community of learners, enhancing development and learning, constructing appropriate curriculum, assessing children’s learning, and establishing relations between schools and families (Bredekamp & Copple, 1997). Thus, DAP is a specific term for suggested early childhood pedagogy in the United States. The original National Association for the Education of Young Children (NAEYC) guidelines for DAP were strongly based on developmental theory. At that time, more attention was given to the cognitive constructivist perspective of Piaget than to the social and cultural context of development that Vygotsky recognized (Van Horn & Ramey, 2003). More recent revisions acknowledge both of these perspectives in 12 principles of learning. According to DAP guidelines, teachers should be informed by three types of knowledge when they design curricula for young children: general principles about child development and learning, information about the strengths and weaknesses of each child in the class and an understanding of the social and cultural contexts in which the children live (Bredekamp & Copple, 1997). DAP guidelines provide a general picture of what a developmentally appropriate classroom should look like and include examples of appropriate and inappropriate practices. They highlight how individual variation in development and learning should be linked to decisions about the curriculum, teaching and interactions to ensure that teaching decisions take account of the uniqueness of each child as well as group differences in temperament, growth rate, personality and background. Other principles balance the focus on the individual by highlighting the importance of secure social relationships with responsive adults and multiple social and cultural settings for child development and growth. In this context, the benefits of positive teacher–child relationships and cultural sensitivity in the classroom for children’s learning and the development of social competence and emotional well-being are self-evident. Examples for effective teaching practices are: “acknowledge what children do or say”, “encourage persistence and effort rather than just praising and evaluating what the child has done”, “give specific feedback rather than general comments”, “create or add challenge so that a task goes a bit beyond what the children can already do”. These principles are very appealing for practitioners and are widely used in the United States and have been subject to educational research in early childhood education. DAP is seen as a framework that supports a child-centred approach which also stresses heavily the importance of scaffolding (Walsh, McGuinness, Sproule, & Trew, 2010).

99. Van Horn, Karlin, Ramey, Aldridge, & Snyder (2005) review existing US-publications on the effectiveness in DAP. Although DAP is widely accepted, the authors find no evidence of consistent effects of DAP for cognitive or academic outcomes. When looking into the results of studies with regard to effects of DAP on cognitive outcomes at the preschool and kindergarten level, the reported results of different studies were mixed. Some reported positive effects; other studies could not establish any effects or even found negative effects. Van Horn et al. (2005) point to severe

methodological problems of the existing studies. Most of the studies for example do not take account of the multilevel structure of the data. As a consequence, the authors conducted Monte Carlo stimulation to account for the data structure. It turned out that most of the reported significant effects would not have reached statistical significance, if the analyses had been conducted appropriately. Finally, one has to conclude that there is no consistent evidence on a positive effect of DAP on cognitive and academic outcomes. Furthermore the possibility of specific effects of DAP for different groups of children has not been analysed carefully in the existing studies. The authors also underline the need of studying the influence of broader school context on the effects of instructional and teaching strategies (Van Horn et al., 2005).

100. Research on non-academic measures found that children in developmentally appropriate classrooms — especially boys — suffered considerably less stress, and enjoyed improvements in motivation and emotional development, when compared to children in more traditional classrooms (Dunn & Kontos, 1997; Van Horn et al., 2005; NAEYC, 2009). Further research also points to potentially positive impact of DAP on children’s ability to initiate and maintain interpersonal relations (Schmidt, Burts, Durham, Charlesworth, & Hart, 2007). Northern Ireland developed a play-based curriculum based on DAP, called the Enriched Curriculum. The curriculum was evaluated, and the evaluation study may be considered as one of the higher standard research studies in this field. The study produced heterogeneous results. McGuinness et al. (2014) recently presented findings on the primary school careers of two successive cohorts of Enriched Curriculum children, comparing them with year-ahead control children who attended the same school. In the first two years of primary school the achievements of Enriched Curriculum children in reading and mathematics fell behind, but most of them caught up by the end of Year 4. Overall, the play-based Enriched Curriculum had no positive effects on the development of reading and mathematics skills. But Walsh and colleagues (2010) report positive effects on learning dispositions and attitudes as the pupils progressed into Key Stage 2; this was particularly true as the children got older. There were also indications that pupils had stronger beliefs that they could influence their future learning through their own efforts and that they were more motivated through interest and the desire to improve their knowledge and skills; they were more curious; and they were prepared to accept more mental challenge and take on more difficult work (Walsh et al., 2010).

5.2 Are alternative pedagogical approaches related to better academic development or well-being of children than traditional approaches?

Alternative co-constructive pedagogical approaches such as Montessori, Steiner or Freinet can lead to better skills and abilities especially with regard to motivational aspects such as self-regulation and self-determination. The programme fidelity mediates the effectiveness of pedagogical approaches.

101. Early childhood education models, such as those of Montessori, Reggio Emilia, and High/Scope, have all been highlighted as pedagogical approaches for success in early intervention studies (e.g. Belfield et al., 2006; Currie & Thomas, 1995; Lopata, Wallace, & Finn, 2005; Masserti, 2009; Miller & Bizzell, 1984; Muennig, Schweinhart, Montie, & Neidell, 2009). However, comparative studies on differential effects of pedagogical approaches in non-intervention contexts are rare. Andrews (2012) investigated students who had attended different types of kindergarten in the United States. He compared Montessori, High/Scope, Reggio Emilia programs and programs without an identified curriculum model. 126 children were included and rated with regard to their school readiness. Overall, children from schools without an identified curriculum (traditional) scored significantly better. On the subscales, significant differences were found with regard to self-regulation

and social expression, but not with regard to early academics. Although Andrews (2012) study is interesting because it compares various pedagogical approaches, the sample is rather small and some methodological short-comings must be considered.

102. Montessori education plays an important role especially in the United States, and thus a number of studies exist with regard to the specific effects. Dohrmann, Nishida, Gartner, Lipsky, and Grimm (2007) found that children who had attended public Montessori programs from ages 3 to 11 performed better in math and science at ages 15 and 18 than children who attended traditional public schools. Lillard & Else-Quest (2006) found for children at ages 5 and 12 had better outcomes for low-income children than regular schools. But other studies did not find differences in children's outcomes (e.g. Karnes, Shewedel, & Williams, 1983; Miller & Dyer, 1975). The effects of specific pedagogical approaches may be dependent on the quality of implementation. Lillard (2012) tested whether effects of attending a Montessori preschool vary according to implementation fidelity. Three groups were compared: high fidelity classic Montessori programs, lower fidelity Montessori programs that supplemented the program with conventional school activities and conventional programs in the United States. The sample consisted of 172 pre-school aged children. Children were tested at the start and end of the school year on a range of social and academic skills. Although they performed no better in the fall, children in Classic Montessori programs, as compared with children in Supplemented Montessori and Conventional programs, showed significantly greater school year gains on outcome measures of executive function, reading, math, vocabulary, and social problem solving, suggesting that high fidelity Montessori implementation is associated with better outcomes than lower fidelity Montessori programs or conventional programs.

103. Many parents prefer alternative approaches such as Steiner, Freinet or Montessori to traditional education because they hope for better promotion of academic skills but also for better climate, support of psychological needs, interests, self-determination and well-being of their children (de Bilde, van Damme, Lamote, & de Fraine, 2013). Throughout the world, there are a growing number of preschools that provide alternative curriculums or pedagogical approaches. But methodological sound, comparative studies on the effects of such approaches on school quality and children's development are rare. The existing studies have quite often focused on primary or secondary school age (e.g. Steenbergen, 2009; cited in de Bilde et al., 2013). An exception is the Belgium study of de Bilde and colleagues (2013). They studied a sample of 2,776 children from traditional and Freinet or Waldorf schools from their third year in kindergarten until 3rd grade in primary school. No positive effects of alternative education on school engagement could be established. In contrast, children who were enrolled in alternative school showed less independence compared to children who were enrolled in traditional schools. In general, an association between children's initial language level and later school engagement was found. But this association was weaker in alternative schools compared to traditional schools. Rose, Jolley, and Charman (2012) studied pupils aged five to nine years old being enrolled in Steiner, Montessori and traditional (British National Curriculum) in England. They were interested in differences between these groups of pupils with regard to their arts skills. 135 children were included in the study, 45 of each type of pedagogical approach, 15 from each age group. The participants were asked to complete expressive and representational drawings. Steiner pupils did best in expressive drawings, and Montessori tended to do better than children who were enrolled in traditional, national schools.

104. Summarizing, the research evidence shows that there is no convincing pattern of evidence of positive effects of alternative pedagogical approaches on children's learning or well-being compared to traditional approaches. However, well-implemented programs may lead to better skills and abilities especially with regard to motivational aspects such as self-regulation and self-determination, which seems to play a major role in later school careers and life success. The following section does not look into effects of preschool models as a whole but into different effects of pedagogical strategies, especially differences between teacher-directed (didactic) and child-centred approaches.

5.3 How are teacher-directed (didactic) and child-centred approaches related to preschool quality and to children's learning and development in different areas?

Teacher-led, more formal approaches can improve academic attainment but not over the long term. Predominantly child-led approaches seem to result in better longer term motivation and independence. A balanced approach involving a mix of child and adult led activity seems to be most beneficial for children's short- and longer term development. The individual needs of the children should guide the choice of pedagogical practices and activities.

105. Some of the most comprehensive and robust research on the identification of effective pedagogy has been undertaken in England as part of the EPPE-project (Sylva et al., 2004) and the REPPEY-project (Siraj-Blatchford et al., 2002). The researchers first identified the most effective settings which improved children's development in different areas (cognitive and social-behavioural) and then investigated the features and pedagogy carried out in these settings. It was found that excellent settings were characterised by a balance between teacher-initiated group-work, free play and potentially instructive play activities. In particular, high quality verbal interactions between children and adults were characterised as critical. Siraj-Blatchford et al. (2002) shaped the term of 'sustained shared thinking' in this study. Sustained shared thinking describes "two or more individuals work together in an interrelated way to solve a problem, clarify a concept, evaluate an activity, extend a narrative etc." Both parties must contribute to the thinking and it must develop and extend the understanding (Sylva et al., 2004). The study showed that highly qualified staff carried out sustained shared thinking interactions more often than staff with lower qualifications.

106. These results are supported by other studies. Willson-Quayle & Winsler (2000) compared teacher-directed, scaffolding and child-centred environments in promoting low-income Latino preschoolers' learning, motivation and language development. The children in the scaffolding condition showed best task performance and most positive emotions and affect at the post test. The authors concluded that learning and motivation benefit most from moderate levels of teacher involvement. A German longitudinal study studied the effects of the model programme KIDZ ('Kindergarten of the Future in Bavaria') (Roßbach, Sechtig, & Freund, 2010; Sechtig, Freund, Roßbach, & Anders, 2012). The programme provided children (aged 3-6) with traditional German preschool stimulation referring to all developmental areas combined with best practice for more academic and domain-specific stimulation and preparation for school. First, KiDZ was a programme for all children and for all age groups in preschool (age-mixed classes). KiDZ followed a broad understanding of the goals of preschool education for children (including development of knowledge, metacognitive competencies, willingness to learn as well as interests and motivations). Traditional preschool pedagogy was enriched with domain-specific stimulation. The comprehensive domain-specific stimulation of preschoolers' emergent skills in literacy, mathematics, and science was not primarily carried out in specific planned hours but was mainly integrated into the daily routines. KiDZ tried to be balanced in its approach the use of situation-oriented, child-centred pedagogy and the use of specific teacher-led efforts to stimulate children. Primary school teachers and preschool teachers worked together in the preschool centres. The scientific evaluation established positive effects on the process quality of the participating preschool centres. And the higher process quality resulted in positive effects on the development of children's academic skills (Rossbach et al., 2010; Sechtig et al., 2012). However, not all studies found best results for a mix of child-centred and teacher-directed approaches. Marcon (1999) compared three different preschool models which were identified based on a survey of beliefs and practices. He found that purely child-centred as well as purely teacher-directed, academic approaches showed advantages compared to mixed programmes. However, while practice was supported by professional development in the KIDZ-approach, the distinction of the approaches in the study of Marcon (1999) is only based on beliefs and self-reports on practices. However, an interesting

follow-up study was conducted when the children were in Year 5 and Year 6 of primary school to investigate the effects of different pre-school models on later school success (Marcon, 2002). The study examined report card grades, retention rates, and special education placement of 160 children at the end of their fifth year in school and 183 children at the end of their sixth year in school. Children whose preschool experience was more academically directed had been retained less often than their peers. There were no differences with regard to the identification of special educational needs. By the end of Year 5, there were no differences between the three groups with regard to their academic achievements, but at the end of Year 6 children who had been enrolled in child-centred programs showed better school grades than the other groups. The findings suggest that child-initiated early learning experiences have promoted later school success. Marcon (2002) concludes that the progress of children who were cared for in overly academic and teacher-directed environments before may have been slowed because the introduction of formalized learning experiences happened too early for most children's developmental status. This fits well with results of Pianta et al. (2005). They found that child-centred beliefs of preschool teachers are correlated with higher process quality.

107. Tazouti and colleagues (2011) compared 299 French and 253 German children who attended either nursery school (*école maternelle*) in France or traditional kindergarten in Germany in their early learning abilities. The tests covered nine learning areas relating to arithmetic (spatial organisation, counting, rhythms), reading-writing (visual discrimination, auditory discrimination, sound-spelling patterns), and transversal learning (handwriting, visual memory, auditory memory). The authors assumed that a cross-country comparison between France and Germany would be of particular interest to compare the effects of a formal, didactic "work" oriented approach in preschool and a child-centred on children's learning and development. They found that the mean performances of French and German children did not differ significantly. But there were meaningful differences in subscales. French children obtained better results on the spatial organisation and rhythm tests, whereas German children performed better on the visual memory, auditory memory, sound-spelling pattern and counting tests.

108. Yoshikawa and colleagues (2013) reviewed the (mainly US-American) literature on effective preschool programmes and came to further results. The findings underline that the most important aspects of quality and effectiveness in ECEC settings are a good balance between different types of pedagogy and stimulation and supportive interactions between teachers and children (Yoshikawa et al., 2013). Structural characteristics such as small group sizes might foster intense interactions to take place but they do not assure supportive and stimulating interactions.

109. Still, research also identified specific domain-specific activities that support the development of specific abilities in certain domains. Connor, Morrison, and Slominski (2006) investigated the classroom language and literacy experiences of 156 preschoolers using video observations. Language and literacy experiences were defined across multiple dimensions, and the vocabulary and emergent literacy development were measured. The researchers specifically investigated differential effects of code-focused activities compared to meaning-focused activities. Code-focused activities are activities such as teaching children how to name and write letters, how to rhyme words, how to relate letters to the sounds they make and to sound out words (Connor et al., 2006). Activities that aim at helping children to understand words and passages, comprehend what is read to them are considered as meaning-focused activities. The observations revealed that high variance exists between classrooms with regard to the types of language and emergent literacy activities, across classrooms and for individual children within classrooms. The findings also indicate that more time in emergent code-focused activities was associated with pre-schoolers' alphabet and letter-word recognition growth, whereas more time in meaning-focused activities was related to vocabulary growth.

110. Only teacher- and teacher-child-managed activities were associated with alphabet and letter-word growth, whereas purely child-managed experiences, including play, were also associated with vocabulary growth. De Haan, Elbers and Leseman (2014) studied preschool and kindergarten children in the Netherlands. They investigated effects of teacher-managed and child-managed academic activities in preschool and kindergarten classrooms. It was a small-scale intense study using video observations in eight preschools and eight kindergarten classrooms. It became obvious that there

were great differences between the classrooms with respect to how much time was spent on teacher-managed academic activities. The time teachers spent on math activities was remarkably low. Teacher-managed activities had a positive effect on the development of language, literacy and mathematical skills in preschool children. An interesting effect was found in kindergarten children. Teacher-managed language and literacy activities promoted children's mathematical abilities. Children's language and literacy development benefited from child-managed language and literacy activities. In contrast, child-managed math activities did not influence children's mathematical skills. The authors offer interesting explanations for these findings. They argue that the positive effect of teacher-managed language and literacy activities to preschool and kindergarten's children's math development is due to the fact that improved language skills help the child to better understand mathematical concepts. This explanation is in line with research on effects of parental activities by Anders and colleagues (2012). De Haan and colleagues argue further that the nature of teacher-managed language and literacy activities may be "relatively global" and consequently not effective for children's language development.

111. Temporary preschool programs that focus on specific aspects of learning (such as literacy or mathematics) are often implemented using teacher-directed, more didactic and instructional techniques during specific hours of the day. Recent evaluations show that these programs can effectively promote children's learning, but the effects often seem to be short-term in nature and may diminish very quickly (e.g. Kuger, Sechtig, & Anders, 2012). One reason may be that children acquire skills in unnatural situations, so that the ability to transfer and train these skills in other situations is difficult. This is one reason why the German government recently implemented a federal initiative to promote early language education integrated in daily routines, rather than relying on temporary programmes.

112. A number of studies not only analysed effects of pedagogy on narrowly defined academic outcomes, but also on broader concepts of motivation, interest and self-regulation. The results seem to support the view, that strong didactic, teacher-directed strategies may hamper children's development of motivation, interest and self-regulation in the long run. The balanced approach of the programme KIDZ described above showed no indications for negative effects on children's socio-emotional development or motivational aspects such as children's interest in learning (Kluczniok et al., 2014). Marcon (1999) showed positive effects of child-centred pedagogy on basic skills, receptive and language skills as well as personal, interpersonal and gross motor skills. Children who were cared for in settings with an academic approach showed better written language and play and leisure time skills. The study of Lerkkanen and colleagues (2012) has more credibility in terms of research methods, because the classification of pedagogy is not based on self-reports of teachers only but based on standardized observation measures. The study investigated the association between observed teaching practices and children's interest in reading and mathematics. 515 children were included in the study. Assessments on pre-reading and pre-mathematics skills took place at the beginning of the kindergarten year. Interest was measured the following spring. To observe teaching practices, the Early Childhood Classroom Observation Measure (ECCOM) was used. The study found that a child-centred approach was positively associated with the development of children's interest in reading and mathematics, while a teacher-directed approach had negative effect on children's interests.

113. This supports results of Stipek, Feiler, Daniels, and Sharon (1995) who studied children in didactic highly academic programs as compared to children in child-centred preschool programs. 227 children from different social backgrounds between the ages of four and six years were included. Their achievements in basic skills and a set of motivation variables were measured. Children in didactic, teacher-directed programs showed better skills in a letters/reading achievement test than children enrolled in child-centred programs. But children enrolled in didactic, teacher-oriented programs also showed relatively negative outcomes on most of the motivation measures (dependency on adults, self-esteem, beliefs in the success of own accomplishments). Program effects were the same for children from different social backgrounds. This is in line with views of Goldbeck (2002) who summarizes various research findings. Accordingly, children seem to benefit in more academically oriented preschool programs with regard to achievement tests, but children who take part in child-centred preschool programs show higher self-efficacy, higher expectations with regard to success on academic tasks, less dependency on adults, more pride in own accomplishments and less worries about school

later. So, in the long run with regard to socio-emotional factors which are related to later academic success (e.g. self-regulation), child-centred approaches seem to have advantages. Chambers, Cheung, Slavin, Smith, and Laurenzano (2010) reviewed the literature on effective early childhood pedagogy and suggest a direction not to force a decision between academic teacher-directed approaches on the one hand and child-centred approaches on the other hand. They argue that both approaches consist of elements that can be used to develop comprehensive and effective preschool programs. Academic, teacher-directed approaches generally have clearly defined, specific aims and strategies. This might be an advantage for the teachers as they are easier to apply, and it might also be easier to monitor the development of the children and evaluate their own teaching behaviour. Successfully implemented, teachers provide academic approaches carefully designed to promote children in specified academic areas. Academic, teacher-directed programs can give children a significant academic advantage when they start primary school. On the other hand, giving children choices and opportunities for self-autonomy may promote children's with regard to abilities such as self-regulation and self-control. These are abilities that are believed to have great importance for further development and success while children move through primary school age.

5.4 Research evidence on the effects of different types of play

Play is fundamental in young children's learning and development. But the implementation of guided play times rather than relying on unguided play only is most beneficial for children's development. The role of the preschool teacher is crucial. Guided play requires highly qualified preschool teachers.

114. There is no doubt that play is considered fundamental in young children's learning and development, learning of preschool children takes place in play situations (e.g. McCray, 2008; McCray & Chen, 2012). Traditionally, unguided free play — that is, play activities that are initiated and freely chosen by the child, and sustained without adult interference — was privileged as the purest form of play and was thus most highly valued by early years practitioners (Walsh et al., 2010). This is true especially for ECEC systems with sociopedagogic traditions.

115. Nevertheless, over the years the question of the quality of children's play in early years settings has been raised. Early research of Sylva (1984) already showed that some play activities are more engaging for children (for example art, puzzles and games, constructional materials) than others (for example dough, sand, and dressing-up). Sylva (1984) also stressed the importance of play partners and sensitive adults to help to reflect in play situations. In contrast, in many early years settings play-times seem to be used as time-fillers and meaningful interactions with adults are rare. Thus, it seems to be useful to differ between unguided free play and guided free play. Meaningful play is seen as a medium for learning when "play opportunities offered to children are playful and engaging to them" (Stephen, 2010, p.4). Scottish research has further highlighted the limitations of unguided free-play in the context of children interacting freely with information and communication technology (ICT). Plowman and Stephen (2005) found that varied patterns of engagement occurred from very high levels to children trying different games at random or just wandering off and becoming frustrated. Slot and colleagues (submitted) also found recently for a Dutch sample of preschoolers that unguided free play is not beneficial for the process quality and language development of children. Research of Alhassan and colleagues (2012) suggests that structured playtime activities are also more effective than unstructured activities with regard to outdoor activities in physical education.

116. The role of teachers in play situations is crucial. Drawing on the results of the longitudinal study Competent Child longitudinal study in New Zealand (Wylie, Thompson & Lythe, 1999), Dunkin

and Hanna (2001) developed a resource for early years teaching called “Thinking Together”. This resource is evidence based as it highlights strategies that have shown to be effective in the mentioned study. It suggests a range of high quality adult-child interactions that can occur in playful settings. In high quality interactions adults are genuinely interested in what the child is doing, adults are listening and extending children’s thoughts and knowledge. Further strategies especially to promote children’s acquisition of new knowledge are open-ended questions or comments, giving the child time to response, and using knowledge of the child to extend the interaction. These elements are reminiscent of the concept of sustained shared thinking of Siraj-Blatchford et al. (2002) described earlier in this review. However while facilitating children’s play, teachers should “refrain from trying to persuade, shape, and rectify the way when children are playing” (Weldemariam, 2014). This would quickly result in loss of interest and motivation in the children and could also prohibit any positive effects on children’s self-regulatory skills.

117. Initiating and maintaining meaningful interactions puts high expectations on the (communicative) skills and abilities of preschool teachers. Studies confirm that preschool teachers have a better understanding of their role in more structured, teacher-led activities. These situations are more predictable than play situations, which are strongly shaped by children’s spontaneous interests and thoughts. Thus, some teachers struggle to cope with their role during structured play as this role seems to be requiring more professional experience and qualifications (Sproule et al., 2005, Walsh et al., 2010). These findings point to the need of comprehensive professional development programs.

5.5 Research evidence on effects of certain pedagogies for children at risk / children from disadvantaged backgrounds

Pedagogy needs to account for the individual characteristics of children from diverse backgrounds.

118. Some studies analysed whether pedagogical approaches in early childhood need to be adjusted to the specific needs of children from disadvantaged background or children at risk of experiencing educational disadvantage for various reasons. Summarizing the literature, it may be concluded that the research evidence supports that pedagogy needs to account for the individual characteristics of children from diverse backgrounds. Thus pedagogy needs to be culturally sensitive (Goldbeck, 2002). Pre-schoolers with high-risk of educational disadvantage seem to benefit particularly from differentiated instruction, and from individualized monitoring of their progress in different learning areas (DeBaryshe, Gorecki, & Mishima-Young, 2009; Gettinger & Stoiber, 2012). Differentiated instruction for children at risk also comprehends strategies such as responsive practices including helping children manage their behaviour, establishing a predictable schedule and the use of cognitively stimulating activities (e.g. shared book reading) (Landry et al., 2014).

6 Discussion And Conclusion

119. The review was set up to compare the structure and pedagogical ideologies of early years’ provision in England to other countries and to explore which policies direct or affect pedagogical approaches and practices. Finally the research evidence on the effects of different pedagogical practices on the quality of ECEC and children’s development was summarized and discussed. First of all the in-depth analysis of the meaning of pedagogy with regard to other concepts revealed, that it is

not always easy to differentiate clearly between pedagogy, curriculum, quality and philosophical approaches. These concepts overlap and they are interrelated. The concept of pedagogy is almost always connected to curriculum, quality and philosophical approaches and cannot be easily separated from these contextual factors. For policymakers this means that pedagogy may not only be affected by policies directly aiming at influencing pedagogy but also by curriculum, by quality regulation, by teaching philosophical approaches in teacher training programs etc.

120. The ECEC system in England has undergone meaningful changes over the last years (e.g. expansion of ECEC services, the introduction and revision of the EYFS, the introduction of the early year's professional status, SURE Start etc.). Around the world very different ECEC systems exist. The comparative overview of just six countries showed how different the overall regulation, staff training and requirements, societal beliefs with regard to ECEC and ideas on the appropriate pedagogy are. Chapter 4 highlighted how policies of different levels of regulation can influence the pedagogy which is implemented in ECEC settings. Not only general trends with regard to pedagogy (e.g. emphasis on scaffolding and meaningful interactions between preschool teachers and children) can be affected through teacher preparation, curriculum, quality standards and control. The overall regulation of the ECEC system can also influence strongly the variety of pedagogical strategies and approaches in place.

121. When comparing the ECEC system of England with the ECEC systems of Denmark, Germany, France, Japan and New Zealand, a number of characteristics are striking. First of all, English ECEC policy and the development of the ECEC system are committed strongly to effectiveness in different learning areas. It needs to be underlined that this does not only relate to academic learning areas but also to non-cognitive learning and developmental areas. Secondly, the English ECEC policy nowadays is strongly committed and based on empirical research evidence. Thus, if you investigate which research projects have been most informative for policy development and practice, you see that two of the most acknowledged research projects around the world in this research area are the EPPSE-project and the REPPEY-study. The principal investigators of these studies have served on Government advisory committees in England concerned with national assessment, evaluation of programmes, and the national curriculum. In this way research evidence directly fed into the development of ECEC policy and preschool teacher preparation. None of the other countries reviewed in this report has shown such a strong commitment to base ECEC policy on research evidence.

122. The international research evidence which was summarized in chapter 5 showed clearly that there is still a need for carefully planned studies which look at specific effects on different learning domains in different countries. The USA, in general has a comparatively strong body of research on the nature and effects of ECEC. The public debate and research on early childhood pedagogy in the United States is often driven by the debate on DAP. DAP is seen as a framework that supports a child-centred approach which also stresses heavily the importance of scaffolding. There is no consistent evidence on a positive effect of DAP on cognitive and academic outcomes. But it seems that DAP has positive effects on developmental areas such as motivation, emotional development and self-regulation. Vulnerable groups seem to benefit especially from DAP in these areas, e.g. in terms of motivational prerequisites of later school success.

123. Alternative co-constructive approaches such as Montessori or Freinet are also often chosen because of the expectation of beneficial effects, particular with regard to children's emotional and motivational development and children's well-being. The few studies that have looked into these mechanisms carefully produced heterogeneous results. But the work of Lillard (2012) highlighted the main point which is also a main challenge to solve for policymakers: the fidelity of implementation of the pedagogical approach. This relates to the question if instructional strategies and pedagogical approaches are put into practice in the way it was intended. The lack of robust effects in evaluation studies is in many cases due to the lack of implementation fidelity thus highlighting an evidence gap in the literature. Thus policy-makers do not only need to decide on general directions but also on how to ensure that the believed best practice is also put into practice in the manner that it is proven to work. Recent findings from Anders et al. (2014) emphasize the importance of continuous and strong

professional support and development to implement and to maintain the quality of specific instructional strategies and pedagogical approaches. It does not seem to be sufficient to provide structures and supportive teaching resources and materials to implement pedagogy effectively, but to support teachers and preschool managers in a comprehensive and continuing way.

124. With regard to the debate on teacher-directed vs. child-directed pedagogy, the research evidence is two-folded. On the one hand, research identified that specific teacher-led domain-specific activities can support the development of cognitive and academic abilities in certain domains like language and literacy-related skills as well as mathematical skills. However, research also provides evidence that the implementation of these strategies is crucial for their effectiveness. Secondly, it appears that the beneficial effects of some specific teacher-led, didactic activities and programmes seem to vanish very quickly and are short-time in nature. Several possible reasons are discussed in the literature. The first reason for diminishing effects might again lie in the quality of implementation. Secondly, it may be that effects of teacher-directed, didactic strategies may not be long-lasting because children might be too young to acquire knowledge and skills in a formal way. The third reason discussed is linked to this argument. It suggests that the learning situations in these programmes are not linked to children's everyday-life and interests. So the situations in which new skills and abilities are acquired might be too artificial. And this may hamper children to transfer and practice these abilities in other situations. The research on the effects of child-centred pedagogy most often does not show better development in broad cognitive and academic skills in the short-run. But studies do find that there may be advantages of child-centred approaches with regard to skills and abilities related to communication. There is stronger evidence that child-centred approaches promote the socio-emotional development and foster skills such as self-regulation, self-concept and learning motivation which are critical for the success of later school careers. From these different research strands one can conclude that both concepts "teacher-led" as well as "child-centred" approaches may have certain benefits, and a good balance between different strategies seem to be most effective in the long run. However, there is also important evidence that any pedagogy needs to be implemented carefully, and that preschool teachers need intense professional support to be prepared to offer high-quality learning opportunities as well as to initiate and carry out meaningful interactions.

125. Play has a major role in many pedagogical approaches throughout the world. In many countries such as Scandinavian countries or Germany the importance of unguided free play is appealing to many early years practitioners. This draws on strong co-constructive beliefs, and the assumption that children learn and develop best when they build up the meaning of the world driven by their own interests and speed. However, the number of studies is growing which points to the fact that guided play is positively associated with preschool quality and is – through higher quality – beneficial for children's development in different cognitive and non-cognitive areas. Thus, research evidence supports a view that play-based pedagogy is most effective when play-situations are used for meaningful interactions between preschool teachers and children which may be described as using "sustained shared thinking". But it is well-known, that this type of pedagogy puts high expectations on the preschool teachers and also needs efforts in strengthening teacher training and professional development activities.

126. Any pedagogy needs to account for the individual characteristics of children, for example for the characteristics of children from diverse backgrounds. The characteristics, needs and beliefs of parents also need to be considered. In the Children Crossing Borders project the views and expectations of immigrant parents regarding the curriculum and pedagogy of ECEC in France, Germany, Italy, England and the USA were examined (Tobin & Kurban, 2010, see Leseman & Slot, 2014). The findings showed that immigrant parents in all countries tended to emphasize academic goals more than the ECEC teachers did and they also preferred a more authoritarian and teacher-centred pedagogy. When considering the research evidence which supports the value of co-constructive and child-centred pedagogy following a holistic approach. The challenge may lie in engaging in dialogues with parents and preschool teachers and construct together a curriculum and pedagogy that integrate parents' and preschool teachers' values on the one hand, and the professional knowledge emerging from research, on the other hand.

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GLOSSARY

Child-centred approaches: Approaches associated with the constructivist theory of learning which assumes that learning is an active and cooperative process where children develop their own solutions to given problems. These approaches have been discussed to stress socio-emotional development and problem-solving abilities.

Curriculum: Refers to the contents of early childhood education such as learning areas and learning goals. In a narrow sense, it describes the “what” of teaching. In a broader sense, it is often defined as “the sum of all experiences in childhood settings”. Even though often simultaneously used, it is not the same as pedagogy.

Developmentally Appropriate Practices (DAP). Teaching practices with the stated goals of creating a community of learners, enhancing development and learning, constructing appropriate curriculum, assessing children’s learning, and establishing relations between schools and families

Freinet pedagogy: Child-centred approach of learning, providing students with means of democracy and self-government to take responsibility for themselves and the community. This approach emphasises the importance of children’s real experiences as authentic opportunities for learning.

Froebel: Named after the German pedagogue Friedrich Froebel (1782-1852), who first coined the term “Kindergarten”. According to his concept, play has a central role in children’s development and learning. His approach is therefore activity based and is designed to promote especially the development of early spatial and mathematical skills.

High/Scope: Child-centred approach that emphasises active learning and the importance of interactions of the children with the environment. It focusses on frequent positive teacher-child interactions in order to form strong relationships, encourage extended play, and problem-solving in everyday situations. The teacher creates an environment in which the children can experiment, learn and discover theories about the world.

Montessori: Child-centred approach taking into account the developmental stages of children. The teacher’s role is mainly to observe the children’s learning in the classroom and arrange for a calm and quiet learning environment while children progress independently and independent from each other from one learning activity to another. The spatial environment is regarded as an additional teacher in ECEC settings.

Orientation quality: Aspect of quality of ECEC that refers to teachers’ pedagogical beliefs such as their definition of their professional role, their educational values, epistemological beliefs, attitudes with regard to the importance of different educational areas and learning goals etc. It also includes aspects comprising the setting, such as the pedagogical approach of the setting and shared educational values and beliefs.

Pedagogy: A set of instructional settings and strategies to support children’s learning, development and the acquisition of skills, competencies, values and attitudes. It does not only apply to the work with children, but also to the work with other target groups (e.g. parents).

Process quality: Aspect of quality of ECEC that refers to the nature of the pedagogical interactions between preschool teachers and children, the interactions among children and the interaction of children with space and materials, as well as the quality of interactions between staff and parents. Conceptualizations cover global aspects (such as warm climate or child-appropriate behaviour) and domain-specific stimulation in learning areas such as literacy, emerging mathematics and science.

Psychopedagogy: The psychology of education.

Reggio Emilia: A child-centred approach, focussing on the children’s interests to guide classroom activities. Learning is not directed by the teacher, but by the children’s interactions with their environment. By those interactions, children are assumed to construct meaning of their world.

Scaffolding: A pedagogical intervention with instructive play that encourages the child’s co-construction in learning and teaching.

Situation-oriented approach: In this approach, every-day situations and topics are taken up as “key situations” that children can learn from. It focusses on preparing children for life by learning in “real situations” and defines social responsibility as a prior educational goal.

Steiner (Waldorf) education: A pedagogical approach based on an anthroposophical view of the developing human being. As a rather non-academic form of education assuming formal learning to start only at the age of 7, it focusses on practical, hands-on activities and creating environments that foster creative play.

Structural quality: Refers to aspects such as class size, teacher-child-ratio, formal staff qualification levels, provided materials and size of the setting. It is regarded as being subject to regulation by policy and funding.

Sustained shared thinking: A concept describing how “two or more individuals work together in an interrelated way to solve a problem, clarify a concept, evaluate an activity, extend a narrative etc.” Both parties must contribute to the thinking and must develop and extend the understanding.

Teacher-directed, didactic approaches: “Traditional” form of teaching where the teacher determines for the children what they will do and when. These approaches have been associated with the acquisition of basic skills and knowledge.

Table 1. Overview of demographic and social indicators

	Area (km ²)	Population (million) (2013)	Population density (inhabitants /km ²) (2013)	% of population with foreign nationality (2013) ²	Fertility rate (births per woman) (2012)	Compulsory schooling age	Population under compulsory schooling age as % of total population ³	Female employment rate (25-54 age cohort) ⁴	Maternal employment rate – child under 15 ⁴	Social expendi- ture as % of GDP (2013) ⁵	Government expenditure as % of GDP	
											Childcare (2009) ⁶	Pre- primary education (2011) ⁶
England	130,269	53.9	411 ¹ (2012)	7.7*	1.9 ¹	5	6.26	74.45*	64.34*	23.8*	0.5	0.42*
Denmark	42,430	5.6	132	6.7	1.7	6	6.50	82.91	84.01	30.8	0.7	1.41
France	547,660	66.0	121	6.2	2	6	7.33	76.23	72.52	33.0	0.4	0.71
Germany	348,570	80.6	231	9.4	1.4	6	5.28	77.81	67.02	26.2	0.1	0.59
Japan	364,500	127.3	349	1.5	1.4	6	4.14	65.73	52.50	22.3 (2010)	0.3	0.22
New Zealand	263,310	4.5	17	m	2.1	6	8.32	74.16	62.23	22.4	0.1	0.60

Source: The World Bank, unless otherwise specified

* Data for all of UK

¹ From the Office for National Statistics (ONS)

² UK, Denmark, France, Germany from Eurostat, Japan from Index Mundi

³ England – ONS, Denmark – Statistics Denmark (2014); France – Insee (2014); Germany – Destatis (2011); Japan – Statistics Japan (2012); New Zealand – Statistics New Zealand (2013)

⁴ OECD Family Database, chart LMF1.2.A.I: Japan (2005); New Zealand (2009); Denmark (2010); UK, France, Germany (2011)

⁵ OECD Statistics estimates

⁶ OECD Family Database, chart PF3.1.A

⁷ OECD, Education at Glance (2014), table B2.3.

Table 1. Table 2. Overview of ECEC regulation and policy

	Split system ?	National Curriculum	Ministry in Charge 0 – 2	3 – schooling age	Attendance rates at formal ECEC services (%) ¹		Parental Leave (2013) ²					
					0 – 2	3 – schooling age	Maternity		Paternity		Parental (excluding exclusively maternity or paternity)	
					Duration (weeks)	APR ³	Duration (weeks)	APR	Duration (weeks)	APR		
England	✘	✓	Department for Education		58	91	52	22.5	2	19.1	18 ^{4,9}	0
Denmark	✘	✘	Ministry of Children and Education		67.9	97.3	18	51.5	2	51.5	32 ⁴	51.5
France	✓	✘	Ministry of Social Affairs, Employment, and Solidarity and the Ministry of Health, Family, and Handicapped Persons	Ministry of Youth, National Education, and Research	48.7	97-100*	16	98.4	2	98.4	156 ^{4,7}	18.7
Germany	✘	✘	Ministry for Family Affairs, Senior Citizens, Women and Youth		27.6	93.4	14	100	0	0	156 ^{5,7}	49.4

											EDU/EDPC/ECEC(2015)7		
Japan	✓	✗	✗	Ministry of Health, Welfare and Labour	Ministry of Education, Culture, Sports, Science and Technology	25.9	90.3	14	66.7	0	0	52 ⁸	50
New Zealand	✗		✓	Ministry of Education		41.4	66.5	14	46.5	1 or 2	0	52 ^{5,6}	0

* Depending on area¹ **EN** – 2012, Huskinson, et al. (2014); **DK** – 2013, Statistics Denmark, own calculations; **FR** – 2011, Naumann, et al. (2013); **GER** – 2012, Statistische Ämter des Bundes und der Länder;

JP – 2010, OECD Family Database; **NZ**– 2013, Statistics New Zealand, Education Counts, own calculations

² OECD Family Database, table PF2.1.A, Moss (2014)

³ APR: “average payment rate” – the average replacement rate over the length of paid leave entitlement for a person normally on average wages.

⁴ Individual entitlement

⁵ Family entitlement

⁶ Including any maternity leave taken, excluding paternity

⁷ Until child is 3 years old both parents can take leave

⁸ Can be extended to 60 weeks, if both parents share some of the leave

⁹ To be taken up to child’s 5th birthday, with no more than 4 weeks per year

