



Curriculum and Quality Analysis and Impact Review
of European Early Childhood Education and Care



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CARE

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Executive summary

Work Package 6 (WP6) of the CARE-project has been in charge of developing a set of European indicators of quality and wellbeing based on a quality framework that is sensitive to cultural variation in ECEC across Europe and to differences in the priorities of countries regarding the evaluation and monitoring of child wellbeing in early childhood education and care (ECEC).

At the start of the CARE-project, a comprehensive framework of the core facets of ECEC quality and child wellbeing has been outlined and related to the bio-social-ecological systems theory of Bronfenbrenner. Following Bronfenbrenner's model, the current framework distinguishes between indicators at the individual child level, the microsystem level of group or classroom processes involving children and educators, the meso- and exosystem level of structural and organizational characteristics at the ECEC centre or service, and the macrosystem level of policy making, legislation and governance of ECEC. In line with this, the European Indicators of Quality and Wellbeing presented in this report comprise of 7 indicators at the level of the municipality, region or state, 20 at the level of the ECEC centre and/or service provider, 14 at the level of the educators and daily group processes, and 3 at the level of the individual child, 44 in all. For each indicator, brief annotations have been added to summarize the evidential basis, while referring to the systematic reviews, secondary data analyses, large scale quantitative and small scale in-depth qualitative studies of CARE.

The indicators can be regarded as evidence-based recommendations for practice of high quality to increase the beneficial impact of ECEC on individual children, their families and communities, and society at large. The indicators also allow verification. They can be further operationalized in assessment scales and benchmarks for internal self-evaluation, for external quality monitoring, and for comparisons across countries.

The indicators of quality and wellbeing presented in this report are based on the findings from all CARE workpackages and on extensive discussions with the CARE Advisory Committee and invited external experts. The indicators have undergone several revisions and reflect the consensus of the CARE-team. The indicators are adjusted to the cultural differences between the European countries participating in the CARE project. They integrate the evidence reviewed and collected within the CARE-project. They reflect the views of important stakeholders – parents, educators, policymakers – as well as the opinions of educators participating in the focus group discussions conducted within the CARE project. The specification of indicators at different system levels reflects our conviction that quality, wellbeing and beneficial outcomes at the child level, in short and long term, require a competent ECEC system at all levels.

Introduction

Work Package 6 (WP6) of the CARE-project has been in charge of developing a set of European indicators of quality and wellbeing based on a quality framework that is sensitive to cultural variation in ECEC across Europe and to differences in the priorities of countries regarding the evaluation and monitoring of child wellbeing in ECEC (CARE, 2014a). The objective is stated as follows in the Description of Work:

Objective 6.3: *To integrate the findings of several WPs into a comprehensive and culture-sensitive European framework for evaluation and monitoring of the quality and effectiveness of ECEC and child wellbeing, while taking into account the values, beliefs and concerns of important stakeholders: parents, ECEC teachers and national educational and social policy representatives.*

At the start of the CARE-project, an initial model has been developed (D6.1; Moser et al., 2014), outlining a comprehensive framework of the core facets of ECEC quality and child wellbeing and relating this framework to the bio-social-ecological systems theory of Bronfenbrenner. This general and overarching initial framework has been further developed, refined and specified in the present report. Following Bronfenbrenner's model of different system levels, the current framework of indicators distinguishes between indicators at the individual child level, the microsystem level of group or classroom processes involving children and educators, the meso- and exosystem level of structural and organizational characteristics at the ECEC centre or service, and the macrosystem level of policy making, legislation and governance of ECEC (which can pertain to the level of the municipality, region or state depending on a country's ECEC governance structure). The framework provides guidelines for evaluating: a) wellbeing and engagement of the child; b) curriculum characteristics, pedagogical approaches, and process quality dimensions at the group or classroom level; c) structural conditions, organizational culture and organizational quality of ECEC at the centre or service provider level; d) design of the ECEC system, accessibility of ECEC, specific policies and legislation, funding and quality monitoring at the governance level.

The indicators of quality and wellbeing presented in this report are based on the findings from all CARE workpackages and on extensive discussions with the CARE Advisory Committee and the invited external experts at the CARE closing meeting in Lisbon, on the 6th and 7th of October 2016. The indicators have undergone several revisions following internal and external discussions, and reflect the consensus of the whole CARE-team. The indicators are adjusted to the cultural differences between the European countries participating in the CARE project. They integrate the evidence reviewed and collected within the CARE-project. They reflect the views of important stakeholders – parents, educators, policymakers (D6.2) – as well as the opinions of educators participating in the focus group discussions conducted within the CARE multiple observational case study of good practices (D2.3). The specification of indicators at different system levels reflects our conviction that quality, wellbeing and beneficial outcomes at the child level require a competent system at all levels (D3.3).

The indicators can be regarded as evidence-based recommendations for creating practice of high quality to increase the beneficial impact of ECEC on individual children, their families and communities, and society at large. We hope, and we believe, that the current framework of

indicators will support educators, service providers, policymakers and governments in creating good and effective practice. The indicators are formulated in a way that allows verification. In this sense, the presented indicators can be used for (self-)assessment and (self-)monitoring at different system levels. They can be further operationalized in assessment scales and benchmarks for internal self-evaluation, for external quality monitoring, and for comparisons across countries.

In what follows, we first describe the revised initial framework that guided the work in the CARE-project. We add a concise overview of all relevant CARE reports, addressing the different ecological system levels distinguished in the initial framework. Then we introduce the framework of European Indicators of Quality and Wellbeing. We start with a preamble that explains the approach and central concepts in the framework. Then we provide the indicators, with annotations briefly describing the evidence collected within CARE, on four levels: (1) quality of policy and legislation at the municipal, regional or state-level; (2) quality at the centre and service provider level; (3) quality and wellbeing at the group (classroom) and educator level; (4) quality and wellbeing at the child level.

Overview of CARE reports

Work package 2 - Curriculum, pedagogy, and classroom quality: promoting effectiveness of ECEC

- D2.1 Overview of European ECEC curricula and curriculum template (Kathy Sylva, Katharina Ereky-Stevens, Ana-Maria Aricescu)
- D2.2 The relations between structural quality and process quality in European early childhood education and care provisions: Secondary analyses of large scale studies in five countries (Pauline Slot, Marja-Kristiina Lerkkanen, Paul Leseman)
- D2.3a Multiple case study in seven European countries regarding culture-sensitive classroom quality assessment (Pauline Slot, Joana Cadima, Jenni Salminen, Giulia Pastori, Marja-Kristiina Lerkkanen)
- D2.3b Video Library: Teacher training material consisting of annotated video clips of good practices, collected in the case study (Together with WP7: D7.4 Educational Kit) (Joana Cadima, Jenni Salminen, Giulia Pastori, Pauline Slot, M. Clara Barata, Marja-Kristiina Lerkkanen)
- D2.4 Integrative report on a culture-sensitive quality & curriculum framework (Kathy Sylva, Giulia Pastori, Marja-Kristiina Lerkkanen, Katharina Ereky-Stevens, Pauline Slot)

Work package 3 - Professional development: impact and innovation

- D3.1 Comparative review of professional development approaches (Bente Jensen, Rosa Lisa Iannone, Ulrik Brandi, Susanna Mantovani, Chiara Bove, Małgorzata Karwowska-Struczyk, Olga Wysłowska)
- D3.2 Report and scientific paper on the effects of professional development, based on quantitative analysis (Peter Jensen, Astrid Würtz Rasmussen)
- D3.3 Report on “good practice” case studies of professional development in three countries (Chiara Bove, Susanna Mantovani, Bente Jensen, Małgorzata Karwowska-Struczyk, Olga Wysłowska)
- D3.4 Recommendations for common policy across the EU regarding professional development as an element of quality in ECEC and child wellbeing for all (Bente Jensen, Rosa Lisa Iannone,

Chiara Bove, Silvia Cescato, Peter Jensen, Małgorzata Karwowska-Struczyk, Susanna Mantovani, Olga Wysłowska, Astrid Würtz Rasmussen)

- D3.5 WP3 Integrative report contribution (Bente Jensen, Rosa Lisa Iannone, Chiara Bove, Silvia Cescato, Peter Jensen, Małgorzata Karwowska-Struczyk, Susanna Mantovani, Olga Wysłowska, Astrid Würtz Rasmussen)

Work package 4 - Impact of ECEC in short-, medium- and long-term

- D4.1 A review of research on the effects of Early Childhood Education and Care (ECEC) upon child development (Edward Melhuish, Katharina Ereky-Stevens, Konstantinos Petrogiannis, Anamaria Ariescu, Efthymia Penderi, Konstantina Rentzou, Alice Tawell, Pauline Slot, Martine Broekhuizen, Paul Leseman)
- D4.2 Meta-analysis of European longitudinal studies on the effects of ECEC on academic outcomes in literacy and mathematics (Hannah Ulferts, Yvonne Anders)
- D4.3 Overview of quality monitoring systems and results of moderator analysis (Elisabeth Resa, Katharina Ereky-Stevens, Nadine Wieduwilt, Efthymia Penderi, Yvonne Anders, Konstantinos Petrogiannis, Edward Melhuish)
- D4.4 Recommendations regarding quality and impact monitoring for common EU-policies (Yvonne Anders, Edward Melhuish, Katharina Ereky-Stevens, Efthymia Penderi, Konstantinos Petrogiannis, Elisabeth Resa, Hannah Ulferts, Nadine Wieduwilt)

Work package 5 - Socioeconomic aspects of ECEC

- D5.1 The socio-economic dimension of early childhood education and care in Europe (Yusuf Emre Akgündüz, Özgün Ünver, Janneke Plantenga, Ides Nicaise)
- D5.2.1 Inclusiveness of early childhood education and care: Seven case studies across Europe (Özgün Ünver, Ides Nicaise, Katharina Ereky-Stevens, Kathy Sylva, Kati Vasalampi, Marja-Kristiina Lerkkanen, Maritta Hännikäinen, Jenni Salminen, Elisabeth Resa, Yvonne Anders, Marlen Müller, Maria Odemarck, Giulia Pastori, Francesca Zaninelli, Caterina Falcone, Małgorzata Karwowska-Struczyk, Olga Wysłowska, Kamila Wichrowska, Cecília Aguiar)
- D5.2.2 Accessibility and use of early childhood education and care: A comparative analysis of 34 European countries (Özgün Ünver, Tuba Bircan, Ides Nicaise)
- D5.3 The impact of ECEC on parental employment and child development (Thomas van Huizen, Janneke Plantenga)
- D5.4 Report on costs-benefits estimations of ECEC (Thomas van Huizen, Lisa Duhms, Janneke Plantenga)
- D5.5 WP5 integrative report: Socio-economic aspects of ECEC (Ides Nicaise, Janneke Plantenga, Tuba Bircan, Özgün Ünver, Emre Akgündüz, Thomas van Huizen, Wouter Schepers)

Work package 6 - European indicators of quality and wellbeing in ECEC

- D6.1 Initial framework for evaluating and monitoring ECEC quality and wellbeing (Thomas Moser, Edward Melhuish, Konstantinos Petrogiannis, Giulia Pastori, Pauline Slot, Paul Leseman)
- D6.2 Stakeholders Study: Values, beliefs and concerns of parents, staff and policy representatives regarding ECEC services in nine European countries (Martine Broekhuizen, Paul Leseman, Thomas Moser, Karin van Trijp, Edward Melhuish, Giulia Pastori, Konstantinos Petrogiannis)

- D6.3 European indicators of quality and wellbeing (Thomas Moser, Paul Leseman, Edward Melhuish, Martine Broekhuizen, Pauline Slot)
- D6.4 CARE integrative report: Revised quality framework, indicators of quality and child wellbeing in ECEC, and policy recommendations (Thomas Moser, Paul Leseman, Edward Melhuish, Martine Broekhuizen, Pauline Slot)

European Indicators of Quality and Wellbeing with annotations

Quality of policy and legislation at the municipal, regional or state-level¹

Availability, affordability, accessibility and outreach

- 1) Early Childhood Education and Care (ECEC) is available, affordable and accessible for all children from at least three-years to primary school age. ECEC is available, affordable and accessible for all children from zero to three-years for families who need the provision in order to combine care with work, study or otherwise qualifying for work, or for children for whom ECEC before age 3 is necessary for development and learning.**

This indicator is based on the review of international research conducted in CARE (D4.1), the meta-analyses of recent effect evaluations of ECEC programs, including European studies (D4.2), the overview of general population studies into the effects of ECEC and system-wide changes in ECEC (D5.1), the analysis of effects of post second world war spending on ECEC on students' PISA literacy and math scores at age 15 in 22 OECD countries conducted in CARE (D5.3), and the costs-benefits analysis of the Spanish LOGSE reform (extension of universal preschool) also conducted in CARE (D5.4). These studies provide convincing evidence for the beneficial effects of ECEC for all children in the age range of 3 years to primary school age, with consistently stronger effects on children from low SES, cultural minority and immigrant families. Effects concern immediate wellbeing and developmental and learning outcomes, long-term school achievement, (mental) health and labour market position. Good quality is a prerequisite for positive effects on outcomes, whereas low quality can be harmful, as some studies have revealed (D4.1). The review of international research suggests that for the age range from 0- to 3-years, the evidence for effects on the general population is less conclusive, with some studies showing potential negative effects of a very early onset (e.g., at age 3 months or earlier) combined with long hours use of ECEC (35 hours or more per week). This negative effect appears to be linked with ECEC of low quality centre care but not individual care (e.g., childminders)². Other studies (including a few European studies) show increased physiological stress and childhood diseases in infant care. This suggests that parallel measures to support parents in combining work and care, such as longer parental leave, are relevant for the 0- to 3-years period, and in particular for the infancy period, (D4.1). The beliefs of parents, and especially of parents with non-Western immigration background, are less supportive of early centre-based care before age three, according to findings in the stakeholder survey conducted within CARE (partly reported in D6.2, partly in presentations and forthcoming publications). Concerning 0- to 3-year-old children from disadvantaged groups, the evidence of positive effects of good quality ECEC on children's outcomes is overall strong (D4.1). Further evidence suggests that in the years before age 3, and in the years thereafter family and parent support programs, home-based education programs, family day care or child-minding services can contribute to

¹ Depending on the system of governance and ultimately responsible authority.

² Melhuish, Gardiner & Morris (forthcoming).

positive developmental and learning outcomes, and thus can be considered alternative or complementary ways for supporting disadvantaged children and families. (D4.1, D5.2.1).

2) The ECEC system is universally accessible and (developing towards a system that) integrates different functions (e.g., care, education, family support) for children from zero to primary school age under one responsible ministry.

This indicator is based on the evidence collected in CARE that universal systems are perceived by parents of all backgrounds as more accessible and less stigmatizing than split systems. This perception of parents, in turn, leads to higher uptake (D5.2.2). Also an earlier onset and higher financial support, through means-tested tax allowances or reduced fees, increases the use of ECEC, in particular by disadvantaged groups (D5.2.2). Other evidence indicates that investments in ECEC provision can lead to a less fair distribution of public wealth if the provision is not used by all groups equally. Analysis of public spending on ECEC and PISA literacy scores in 22 OECD countries revealed that the positive effects of public spending were mainly located in higher SES groups as the use of ECEC increased substantially in these groups, but not so much in lower SES groups (D5.3). Also the comparative review of governance and quality assurance systems in 11 European countries participating in CARE (D4.3) found that split and fragmented ECEC systems are associated with incoherent and inconsistent monitoring.

3) There is national policy, feeding into regional and local policies, targeted at socioeconomically, culturally, linguistically or geographically disadvantaged groups to facilitate participation of children from these groups in high quality ECEC. There is appropriate funding and measures that ensure a high level of take-up and quality in order to provide all children with the opportunity to fulfil their potential. The ECEC system is inclusive for children with additional or special needs, children from lower socioeconomic background, immigrant groups, ethnic-cultural and language minorities, and children from rural areas. The ECEC system promotes institutional arrangements, regulations and legislation that lead to use of ECEC across all groups regardless of disadvantage, and take-up and sufficiency of provision are monitored.

There is compelling evidence that public investments in ECEC have higher social and economic returns for society as a whole the better the ECEC system succeeds in including children from disadvantaged backgrounds and in effectively supporting these children's early development and learning (D5.1, D5.3, D5.4). Targeted policies, public provision of ECEC and increased public spending to include children from disadvantaged communities are associated with increased participation of these children (D5.2.2) and with comparatively good quality of ECEC for these children (D2.2), that can lead to more equal outcomes and social equity (D4.1, D5.1, D5.4).

Universal, integrated systems are perceived as more accessible and less stigmatizing (D5.2.2). Split systems – without a targeted policy to include children from disadvantaged backgrounds – are associated with lower quality for disadvantaged children due to (self-)selection mechanisms (D2.2). Lower quality may also arise from a high concentration of children with disadvantages in groups and classrooms and can be the (unintended) result of targeted policy in a split system (D2.2, D4.1). Cultural barriers to participation should be avoided by creating an inclusive climate in ECEC, based on respect for and welcoming of diverse cultural and religious values (D5.2.1). Tensions can arise between universal and targeted policies. A *progressive universal approach* to

service delivery that is inclusive but with targeting of extra support for extra need, is required to deal with these tensions. In the observation study of good practices in European ECEC there are examples of 'inclusive targeting', from which guidelines for centre-level diversity and inclusiveness policy and classroom-level process quality have been derived and included in this framework (D2.3; see indicators 32, 34 and 41).

National curriculum and quality guidelines

- 4) There is a national curriculum, or set of curriculum guidelines, covering the whole period from zero to primary school age (and eventually beyond), specifying goals for development, wellbeing and learning for different developmental stages, pertaining to all children and to all services and programs for children below primary school age (e.g., child minding programmes, home-based educational programmes, day care centres, preschools). The curriculum takes a holistic perspective considering all aspects of a child's development, and recognizes that the child is an active learner. The curriculum strikes a balance between experiences relevant to goals in the physical-motor, cognitive, social, emotional, moral, and creative-arts domains, acknowledges the interrelatedness of these different goals, and uses social interaction and play-based learning as the main model for achieving all goals.**

The state or national curriculum guidelines reflect a society's consensus on important goals and values regarding the development, socialization and learning of young children. The analysis of European early childhood curriculum guidelines undertaken in CARE reveals a common European core with respect to view of the child as active learner who participates in his or her own development, importance of broad, 'holistic', goals for development and learning, and importance of play and playful learning to serve holistic development (D2.1). Although the European ECEC curricula are holistic in that a broad range of goals of development and learning is specified, an imbalance was found between the explicitness and elaboration of goals relating to cognitive, communicative and (pre)academic competences, on the one hand, and the articulation and elaboration of social, emotional, moral and new, '21st century' competences, on the other hand. The results of the CARE stakeholder survey among parents and educators support the holistic approach and the integration of play, playful activities and learning. Parents and educators mention a wide range of academic, executive, emotional, and social competences as important outcomes for children in early childhood, including competences that can be regarded as 21st century skills for which the fundamentals are laid-out in early childhood (e.g., communication skills, openness to experiences and learning, creativity, self-regulation, interpersonal relational competence, problem solving). Parents value highly both preparing children for school and offering a child-centred provision with play-based curriculum, as is reflected in the high correlation between parents' rankings of the two orientations (D6.2 and additional presentations and forthcoming publications). There is an imbalance between curriculum guidelines for the age ranges 0- to 3-years and 3- to school-age. For the youngest children curriculum guidelines are often absent, or less elaborated and less holistic. Parents emphasize curiosity and openness to new experiences, emotional self-regulation, and interpersonal relational competences equally as highly, or more than (pre)academic competences. The in-depth observation study of good practices of ECEC in Europe shows that a balanced *implemented* curriculum, addressing (pre)academic and social-emotional and 21st

century key competences, and integrating learning and play to serve developmental and learning goals deemed important by parents and educators, is associated with higher process quality and also with higher child wellbeing and child engagement in activities, as observed with validated observation instruments (D2.3).

5) Respect for and acknowledgement of diversity in all respects is part of the national curriculum or national curriculum guidelines.

Acknowledgement of and respect for diversity pertaining to children's abilities, gender, social, cultural and religious background is mentioned in most of the examined European curricula and reflects a common core value (D2.1) and is considered a universal child's right (D6.1). While acknowledging differences between countries in this regard, the majority of parents and an even larger majority of educators highly value respect for diversity as an important development goal to be fostered in ECEC (D6.2). Also policy makers attach high value to diversity and inclusiveness, higher than parents do. According to the focus group interviews with lower SES and immigrant parents in six countries, respect for social and cultural diversity is an important condition for inclusive ECEC and can reduce cultural barriers to the use of ECEC for disadvantaged groups (D5.2.1). Related to this, the stakeholder survey shows that parents with an immigration background value respect for cultural diversity particularly highly (D6.2 and related papers or forthcoming publications).

6) The national curriculum guidelines provide a general framework for pedagogical plans developed at the centre level and allow for adaptations to the local context. The national curriculum guidelines are established in dialogue with representatives of relevant stakeholder groups, including parents, policy makers as well as representatives of the wider society, and are based on or compatible with scientific evidence. The curriculum guidelines ensure the current wellbeing of children and contribute to the development of basic life skills and future wellbeing.

Reviews of curriculum guidelines (D2.1), ECEC governance and quality monitoring systems (D4.3), and reviews and case-studies on professional development (D3.1, D3.3) favour a system of governance and quality regulation in which general guidelines that specify shared views on the child, the common values and goals of development and learning, and appropriate models of pedagogy, provide a framework for local centres and services to develop and implement their own concrete plans for practice. The national guidelines are integrated in these plans while adapting to the local context and involving also parents as stakeholders. Such an approach combines the advantages of centralized (with a focus on standardization and equality nationwide), with decentralized (with a focus on professional ownership and implementation in practice) and stakeholder-involvement approaches (involving parents in defining and evaluating quality) (D3.1, D3.3). National curriculum guidelines without systematic translation in verifiable pedagogical plans and practices, may not sufficiently guarantee equality of experiences for all children due to divergence between the official and the implemented curriculum. This was found in the curriculum study (D2.1). It may lead to an emphasis on easy measurable indicators, while disempowering professionals (D3.1, D4.3). Decentralized local approaches to curriculum and quality, without a guiding state-level or national framework risks divergence in experiences

between children, unequal treatment and unequal outcomes, and low control of overall quality and effectiveness. Involvement of local stakeholders, especially in private markets, without national guidelines and regulations, and without a strong position for the professionals, risks devaluation of professional (research-based) knowledge in shaping ECEC (D3.1) and divergence of experiences for children (D4.3).

- 7) There are national regulations specifying at the ECEC centre or service level the structural quality, the educational requirements of staff, and staff's working conditions that should be satisfied by all ECEC provisions, regardless of whether they are private or public provisions, and regardless of whether they concern home-based or centre-based programmes. The regulations are based on or compatible with scientific evidence. The regulations also specify the requirement at the centre level to have a pedagogical plan and system for quality self-monitoring in place.**

In fragmented systems and in systems with mixed private and public ECEC provision, there is a need to ensure equal quality for all children regardless of the ECEC subsystem they use and to level the playing field for fair competition between private and public ECEC providers (D4.3, D5.3).

Education of leaders, educators and support staff, and working conditions

- 8) The systems of educator pre-service and in-service education are well-aligned, fulfil complementary roles, and together promote optimal and up-to-date professional competences. Pre- and in-service professional development together aim at achieving a level of professional functioning of the majority of educators at the Bachelor's level, and for educational leadership at the Master's level.**

There is no conclusive evidence that higher academic level of pre-service education alone leads solely or directly to higher process quality (D2.2). Lower academic level of pre-service education (and other less favourable structural quality characteristics) can be compensated by high quality and continuous in-service professional development (D2.2). Increasing the academic level of pre-service education risks increasing the theory-practice gap (D3.1). Case-studies on professional development in three countries provided examples of strong alignment of pre- and in-service education and scientific research in combined professional development and practice improvement (D3.3). The in-depth observational case study of good practices in seven countries shows that in-service professional development, a collaborative professional climate at the centre-level and high team-cohesion relate to higher observed process and curriculum quality (D2.3).

- 9) The minimum working conditions should include the equivalent of a minimum of one hour per week for in-service professional development. The working conditions, salary levels, professional development opportunities and career prospects should reflect the impact high quality ECEC can have for children and society, and are equivalent to professions of similar status and societal impact (e.g., primary education, health care).**

Continuous professional development that includes regular team-meetings to reflect on practice and to develop, evaluate and improve process quality and implemented curriculum is regarded as the most promising approach to quality assurance and quality improvement of ECEC (D2.2, D3.1, D3.3). A quantitative meta-analysis of European in-service professionalization programmes underscores the importance of team-based reflection and learning (D3.2). Continuous professionalization in teams, inter-collegial collaboration, cohesive teams and inclusive centres were related to higher observed process quality in case studies (D2.3). Team-based reflection and learning, however, is not always facilitated through contractual hours ear-marked for these activities. States do regulate pre-service, but not in-service professional development, as was found in a study of professional development in the 11 European CARE countries (D3.1). Often continuous professional development is either lacking altogether or left to individual educators and not further facilitated. Finally, higher qualification and salary levels were found to be related to higher perceived accessibility and inclusiveness of ECEC (D5.2.2).

Quality monitoring and quality assurance

- 10) There is a system (at the national, regional or municipal level) for monitoring adherence to the national curriculum guidelines, the basic regulations of physical safety, health, hygiene, working conditions, structural quality and professional development, and for evaluating the quality and implementation of centres' pedagogical plans. The monitoring system is coherently and consistently applied across all ECEC services, and provides support to services and centres to improve their quality. The state or national monitoring system can include periodic evaluation of representative samples of ECEC provision, in which the satisfaction of stakeholders with the care and education provided, the structural, curriculum and process quality, and the wellbeing and development of children are evaluated.**

Most countries in the review of governance and monitoring systems have systems of monitoring quality and adherence to regional, state-level or national working conditions, structural quality and curriculum guidelines (D4.3). However, in split systems the monitoring systems are often also split, apply different frameworks and standards for monitoring and evaluation of quality to different sub-systems, and often focus on easily verifiable structural conditions (group size, children-to-staff ratio, educator pre-service education level) or basic health and safety aspects (D4.3), which, as 'distal factors', are only indirectly related to 'proximal' process and curriculum quality, and to children's wellbeing and developmental outcomes (D2.2, D2.3, D6.1). A stronger focus on process and curriculum quality, while respecting local adaptations, is recommended (D4.3). The monitoring system should be part of the wider professional ECEC system and, therefore, should not only monitor and assess, but also provide support (e.g., concrete recommendations) to centres to improve quality and curriculum implementation, i.e. monitoring systems should provide formative as well as summative assessment. A supportive monitoring system will receive wider acceptance among professionals and service providers, and will be more effective in regulating and improving quality of the ECEC system (D4.3). The comparative study of national quality monitoring systems identified periodical evaluation of the whole ECEC system as a potentially effective way of reviewing the 'competence' of the whole system and to review the effectiveness of the monitoring systems (D4.3).

Quality at the centre or service level³

Mission, developmental and educational goals, and pedagogical approach

- 11) The centre has a clearly formulated value-based social and educational mission, referring to universal child's rights, principles of equal opportunities for all children to realize their potential, inclusiveness and democratic citizenship, and respect for and valuation of diversity. The centre's mission is established with regard to or in dialogue with, and communicated to all stakeholders in the local community.**

A main contribution to society of universal ECEC is the support ECEC provides to development and education of young children. Supporting labour market participation of women and supporting families to combine work and care is an important function too, but the labour market support function of ECEC is in many countries smaller in macro-perspective (both in terms of the population served and in terms of economic benefits) than the educational function (D5.1, D5.3; see indicators 1, 2 and 3). Targeted policies that facilitate participation of children at risk of sub-optimal development due to socioeconomic or cultural background is a major component of the educational contribution of ECEC to society in macro-perspective (D4.1, D5.1). Therefore, in mixed private-public markets, if public spending is involved, the social and educational mission should prevail over profit, and should level the playing field in local markets to overcome selective use and socially or culturally selective barriers to use.

- 12) The centre has a *pedagogical plan* specifying how the centre's mission, the developmental and educational goals of the national curriculum guidelines, and the prerequisites regarding structural quality and working conditions are realized in practice. This plan is developed in dialogue with staff and representatives of parents and local policy, specifies explicit and verifiable indicators for structural, process and curriculum quality, and hence provides the evaluation frame of the centre's quality self-monitoring system.**

The pedagogical plan is at the heart of the professional ECEC system (see indicators 6 to 10). The pedagogical plan integrates centralized (national) interests, decentralized professionalism and local stakeholder involvement and interests, as is recommended based on CARE studies (D3.1, D3.2, D3.3). The pedagogical plan presents a verifiable translation of the quality and curriculum guidelines for local, regional and/or national quality monitoring (D4.3). The plan describes the centre's policy, regulations and concrete actions with respect to admission and outreach; professional development and quality self-monitoring; involvement of staff and stakeholders, including parents, in goal setting and evaluation of practice; the organization of the work and structural conditions (e.g., opening hours, group composition, group size, allocation of staff); practice development (e.g., planning of activities, designing activities, standards for process quality regarding educator-child interactions, and group processes); and curriculum

³ In states or countries where ECEC centres are governed by the municipality and pedagogical plans are made at the municipal level, the indicators should be read as applying to both the municipal- and centre-level, in accordance with the division of responsibilities.

implementation (e.g., balance of different activities, the implementation of playful learning, the scheduling of activities over time, and the ways in which implementation is monitored).

- 13) The centre has a clear and well-communicated policy for dealing with diversity based upon respect for differences in abilities, and in cultural and religious traditions. The pedagogical plan includes the centre's view on including children with special or additional needs, children from socioeconomically disadvantaged backgrounds, and from cultural and language minorities, and specifies how the educational needs of these children are met in practice. The centre avoids policies or regulations that function as exclusion mechanisms for these groups.**

The (state or national) goals to create accessible and inclusive ECEC for all children, and to reach -out to children from disadvantaged backgrounds and to children with special or additional needs (indicators 3 and 5; D5.1, D5.2.1, D5.2.2) is at the centre-level included in the pedagogical plan and translated in concrete policy, regulations and actions to implement this goal . These policy, regulations and actions should be plausible, feasible and verifiable, and likely to contribute to realizing the overall goals at the centre level. From the pedagogical plan it is clear that there are no regulations or actions that can work as exclusion mechanisms for disadvantaged groups (e.g., such as unwillingness to take food restrictions into account, or requesting extra financial contributions or involvement of parents to a degree or at a level that not all parents can meet).

- 14) If relevant for the population served, the pedagogical plan includes the centre's view on multilingualism and dual language development, and specifies how children's home languages are acknowledged, respected and supported.**

Acknowledgement of and respect for the heritage languages of children and parents of language minorities, and if possible support to multilingual development, is an important factor in reaching-out to these minorities, in increasing their participation and in establishing partnerships between parents and the centre, according to interviews with immigrant parents (D5.2.1; see also indicator 5). Support for heritage languages, in dual language programmes, is highly valued by parents from language minorities, according to the stakeholder survey (D6.2 and related publications). There can be a demand from native parents to implement dual language programmes involving the country's main language and another language of high social prestige (stakeholder survey), and the centre should formulate and implement a clear and fair policy in response to this demand, while taking the interests of other parents in supporting heritage languages into account (D5.2.1). The centre's view on multilingualism and dual language development should be compatible with well-established scientific evidence, which reveals several benefits of multilingualism if appropriately supported.

Leadership and organizational climate

- 15) The leadership ensures that clear goals for the centre's practice are set, in line with the centre's mission and pedagogical plan. The goals for practice are developed, and made operational for the children's groups in close collaboration with all educators and support**

staff. The practice goals are updated as part of continuous professional development and practice improvement.

Pedagogical leadership, next to administrative leadership or general management, is an essential component of a professional ECEC system at the centre level (D3.1, D3.3). The case studies of innovative professional development approaches identified the coordinator or manager as key to successful professional development at the centre level (D3.3).

- 16) The leadership of the centre ensures stability and commitment of the staff by creating a positive work climate and high level of staff wellbeing. The centre is characterized by a fair and transparent system of salaries, incentives and support to individual professional development, collaborative inter-personal relationships between colleagues, high levels of work satisfaction and feelings of belongingness, involvement in major decision making of all staff, an open culture of inter-collegial consultation, and team-based learning. The leadership ensures that the centre adheres to national guidelines, regulations and collective agreements regarding working conditions, salaries and staff's professional development.**

Stable and committed staff, low turn-over, a pleasant work climate and a high level of staff wellbeing are regarded as important structural quality characteristics (D2.2, D3.1, D4.1). The in-depth observation study shows that, in addition to in-service professional development, team-cohesion, inter-collegial collaboration, involvement of all staff in goal-setting and decision making, and a satisfactory work climate are related to observed process quality (D2.3). Parents value a cohesive team and inter-collegial collaboration highly and rank this aspect of the ECEC organization as more important than structural quality conditions such as group size, children-to-staff ratio, educators' pre-service education level and work experience (D6.2 and related publications). Implementation and, whenever relevant, adjustment to local conditions of state-level or national guidelines regarding working conditions is the backbone of the professional ECEC system.

- 17) The team of educators, support staff and leadership represent different qualification levels and complementary professional competences to optimize organizational performance, and is composed of representatives of the community including diverse educational, socioeconomic, ethnic-cultural, racial, and/or religious backgrounds, and consists of men and women. Leadership ensures that the composition of staff mirrors the local and national social and cultural diversity.**

Diversity of competences and backgrounds is regarded as promoting the ECEC organization's performance, capability of flexibly reacting to changes in the (local) context and openness to the needs and demands of the populations served (D3.1, D3.3). Most parents value diversity of staff and find it important that staff composition reflects the diversity of current society, although there are differences between countries in this regard (D6.2). Parents with an immigration background value cultural diversity of staff highly (D6.2 and related publications). Staff with similar cultural backgrounds as parents can contribute to increasing the use of ECEC among cultural minorities by increasing the sensitivity to cultural differences and cultural inclusiveness of the ECEC centre (D5.2.1).

18) The centre has a well-defined system of in-service *continuous professional development (CPD)*, which is embedded in a system of *continuous quality improvement (CQI)*.

- **The system of in-service CPD includes: (a) regular team meetings of all educators, pedagogical support staff and leadership to reflect on practice, to develop and evaluate curriculum activities, to discuss actions for children with additional needs, to discuss and digest relevant research or other professional information, including information from centres of expertise; (b) individual coaching or mentoring of educators on-the-job or via video-based feedback on practice, especially for inexperienced educators; (c) regular consultation of colleagues and sharing of good practices.**

- **The system of CQI includes: (a) regular (for instance, at least annual) systematic centre-wide observation of practice using a validated observation instrument and collected feedback from parents; (b) systematic team-based reflection on the results and joint planning of improvements; (c) implementing improvements and systematic evaluation of the results as part of a continuous regulative cycle; (d) the system of CQI also considers whether annual evaluation is sufficient or should be conducted more frequently, if quality is considered suboptimal.**

Continuous in-service professional development as the central part of, and fully integrated in, a system of continuous practice improvement is a strong determinant of process and curriculum quality (see indicator 8). It can also compensate for less favourable structural quality and can be an important factor for providing high quality ECEC to disadvantaged children, even in circumstances of high concentration of these children (D2.2). CPD and CQI are considered the most effective ways of assuring and improving process quality and curriculum implementation (D3.1, D3.3), and were found to be related to observed process quality and curriculum implementation in the in-depth study of good practices (D2.3). Based on the literature reviews and the quantitative meta-analysis conducted in CARE (D3.1, D3.2, D3.3) and also on the in-depth case study of three examples of professional ECEC systems (D3.3), a set of essential characteristics of CPD and CQI were identified and included in this indicator.

19) The centre communicates and engages in dialogue with important stakeholders, foremost the parents of the children, on a regular basis via accessible media, taking parents' language and media literacy skills into account. The centre actively involves parents, and builds collaborative partnerships with them, in developmental and educational goal setting, in curriculum and pedagogy development, in implementation and evaluation of curriculum and pedagogy, and in the periodic review of the pedagogical plan.

Involvement of parents as stakeholders in the ECEC centre's goal-setting and practice evaluation is an essential component of CPD and CQI, and functions as feedback mechanism in CPD and CQI (D3.3).

- 20) The centre includes the voice of children in developmental and educational goal setting, in curriculum and pedagogy development, and in the periodic review of the pedagogical plan, by regularly consulting children about their experiences and wellbeing using age-appropriate interview, documentation and recording tools (e.g., drawings, pictures, video), and/or by systematically collecting information on children’s wellbeing and development.**

Including the voice of children is part of national curriculum guidelines in several countries (D2.1). It is considered a child’s right (D6.1), and an important feedback mechanism in CPD and CQI (D3.1, D3.3), and it is in line with the importance of involving stakeholders in a professional ECEC system (D3.1, D3.3). Involving the voice of children is also considered essential for child wellbeing and consistent with the shared view of the child as active learner (D6.1; indicator 4).

- 21) The centre is sensitive to differences in views, values and priorities between centre and parents. Hence, where possible, alternative views, values and priorities are recognizably incorporated in pedagogical plans and practices. Where this is not possible, differences in views, values and priorities are respectfully discussed in constructive dialogues, in which professional knowledge is brought to bear on the issues. Consensus is sought through on reconstructed or reconsidered views, values and priorities.**

Parents may differ in views on quality and wellbeing, in beliefs and preferences regarding child rearing and socialization, and may emphasize different goals for development and learning in ECEC (D6.2), which may depend on their social and cultural background (D5.2, D6.2 and related publications). Mutual trust between parents and staff members is essential. Adapting ECEC practice to parents’ views, beliefs and preferences, contributes to the cultural accessibility and inclusiveness of ECEC (D5.2.1, D5.2.2), but should not cross boundaries set by professional knowledge and scientific evidence on what constitutes high quality and effective ECEC. A professional system is characterized by striving for consensus in views, beliefs and preferences through dialogue, and informed by professional standards based on experience and scientific evidence (D3.3).

- 22) The centre is sensitive to parents’ needs, supports parents in providing safe and nurturing home environments, and advises parents on home activities that can be complementary to activities in the centre to promote continuity of children’s experiences, thereby building partnerships with the parents. The centre refers parents to (family) support services if needed.**

The effectiveness and wider impact of ECEC on society can be increased if families are supported in creating safe and nurturing home environments (D4.1). Combinations of centre-based and home-based programmes, and of centre-based programmes with family support services, can increase the long-term effectiveness of ECEC (D4.1). Increasing the continuity and coherence of children’s experiences across contexts (e.g., centre, family) is a general developmental principle that derives from the bio-ecological systems theory (D6.1). Empowering parents in their role as co-educators of the child while respecting the family’s cultural traditions and resources can contribute to increasing the inclusiveness of ECEC (D5.2.1).

- 23) The centre adheres to national regulations of structural quality, for example regarding group-size, children-to-staff ratio, safety and hygiene, and staff educational requirements at the centre-level, and applies these regulations in a differentiated and flexible manner. The centre creates combinations, or configurations, of structural conditions (e.g., group composition by age, group-size, children-to-staff ratio) while considering the background and needs of the children in relation to educators' experience and professional competence, to obtain optimal conditions for process quality, curriculum quality and child wellbeing. The centre avoids unfavourable constellations such as clustering high numbers of children with additional or special needs or with socioeconomic, cultural or linguistic disadvantages in groups with relatively unexperienced or low-educated educators.**

This indicator refers back to indicators 7, 8 and 9, and is the backbone of a national professional ECEC system (D3.1, D3.3). The indicator is also important to level the playing field in the local context, if the local ECEC market is mixed private-public, and to prevent competition leading to lower quality or unfavourable working conditions for staff (D5.1). The second part of this indicator, emphasizing differentiated and flexible application of regulations, is based on the secondary analyses of five European data sets undertaken in CARE, relating structural quality characteristics to observed process quality and curriculum implementation (D2.2), showing interaction and moderator effects that attest to the combined, configurational, systemic effects of structural conditions. If not regulated, there is a risk that children who need high process quality most and who will benefit most from providing them with high process quality, receive the least favourable constellations of structural quality conditions (D2.2). The indicator also creates room for the centre to shape practice beyond strict adherence to single structural conditions and related quality regulations, as is currently often the case due to the regimes of quality monitoring (D4.3).

- 24) The centre provides sufficient, safe and stimulating indoor and outdoor spaces, equipment and furnishing, which are developmentally appropriate. Spatially well-defined activity centres support the holistic curriculum (e.g., literacy, numeracy, and science and technology, arts, creativity, and different types of play). There are quiet areas and areas for indoor and outdoor physical play, and they are easily accessible for children.**

The indicator is based on general, well-established knowledge about the importance of the physical environment, the quality of spaces and the provision of activity centres relating to curriculum goals (e.g., a literacy centre), and the possibility of changing between in- and outdoor activities. The evidence-based consensus is reflected in widely used quality assessment instruments such as the ECERS-R and is specified in national curriculum guidelines in several countries (D2.1). The indicator mentions specifically science and technology centres and/or materials, as they were found to be especially suited to elicit episodes of sustained shared thinking and elaborated educational dialogues in the observational case study (D2.3). Quality of ECEC as indicated by measures such as the ECERS-R is related to child wellbeing and developmental outcomes in many studies (D4.1). According to the stakeholder survey, the physical environment, the equipment and the furnishing of the ECEC centre is considered by

parents a highly important quality characteristic (D6.2). The potential added value of exploring outdoor environments was confirmed in the in-depth observation study (D2.3), revealing that outdoor exploration can initiate high quality educational dialogues as well.

Partnerships with external organizations

- 25) The centre is well embedded in a network of relevant local, regional and national organizations to be able to provide additional services to children and families when needed, either directly or via referral.**

In line with indicator 22, this indicator specifies the importance of well-established relations of the centre with services that can support the centre in providing additional support to children and families, which can increase the impact of ECEC (D4.1). The case study of WP3 describes a local network of services and shows how multidisciplinary expertise is shared as part of continuous professional development and helps to raise the level of professional competence of educators, centres and the local ECEC system as a whole (D3.3).

- 26) The centre has well-developed partnerships with local (neighbourhood) organizations and initiatives, including organizations of particular language, cultural or religious communities, in order to reach-out to local communities and to be sensitive to issues and needs relevant to children and families in these communities.**

Good relationships with organisations of local stakeholders, as part of out-reaching to communities (see indicators 3, 19 and 21), can increase the trust of parents in ECEC and raise their participation. Communication with stakeholder organisations can increase awareness of the needs of parents and of culturally sensitive issues in the local communities, and contribute to creating a (culturally) inclusive climate in the centre (D5.2.1).

- 27) The centre has partnerships with recognized centres of expertise (e.g., research institutes; teacher education institutes) that support leadership and staff to develop, implement and review the centre's pedagogical plan and systems of CPD and CQI.**

This indicator is based on the detailed case studies of CPD and CQI conducted in CARE, showing that the process of team-based quality and curriculum development is benefitted by close and long-term collaboration with research institutes (D3.3).

Quality and wellbeing at the group (classroom) and educator level

Process quality

- 28) The educators create a positive climate in the group or classroom, characterized by warmth, closeness, joy, enthusiasm, engagement, and positive affectionate and caring relationships between the educators and the children, and among the children. The educators rarely raise their voice, and never use physical punishment, sarcasm or scolding to discipline children.**

This indicator is derived from the exemplary existing quality framework of the Classroom Assessment Scoring System (CLASS, with versions for toddlers and kindergartners)⁴. It is part of the general process quality construct, and reflects the broad consensus regarding the importance of the emotional support offered to children. Consensus on this indicator was established in the in-depth case studies and in the related focus group discussions involving staff in different countries commenting on the CLASS and evaluating video-recorded practices in other countries (D2.3). General process quality as elaborated in this and the following indicators has been found to be related to child wellbeing and child outcomes in many studies (D4.1). Note that the CLASS was chosen as an example of a standard framework to be examined in CARE for intercultural validity and acceptance, as the CLASS represents a widely used framework for quality assessment in ECEC with a clear focus on process quality.

- 29) The educators are aware of and sensitive to individual children’s needs, respond to these needs, and react promptly and adequately to signs of distress and insecurity of individual children. Educators engage with all children in a manner appropriate to the children’s developmental level, interests and capabilities, while avoiding stigmatization.**

This indicator is present in several standard quality assessments (e.g, CLASS, ECERS-E) and reflects the consensus regarding the sensitive responsiveness of educators to individual children which was established in the in-depth case studies and in the related focus group discussions involving staff in different countries (D2.3).

- 30) The educators show high regard for *children’s perspectives*, and facilitate children to take the initiative, to make decisions and to experience *agency* in play and other activities. They listen to children, facilitate children to express their ideas, follow children’s initiatives and expand on them to foster new skills. While facilitating children to initiate and lead many activities, educators are involved, enrich children’s activities and take the lead when necessary.**

This indicator is present in several standard quality assessments and reflects the broad consensus on the importance of a high regard for children’s perspectives and a child-centred approach, which was established in the in-depth case studies and the related focus group discussions involving staff in different countries (D2.3). General process quality is found to be related to child wellbeing and child outcomes (D4.1).

- 31) The educators provide guided activities in small subgroups and one-to-one interaction within the whole group. Many educational activities are carried out in small groups or one-to-one interaction to ensure engagement of all children and to allow for sustained shared thinking in extended educational dialogues with children, characterized by frequent back-and-forth exchanges, validation by the educators of children’s initiations and responses, the use of open-ended and follow-up questions, and a focus on deepening children’s understanding.**

The in-depth observation study of good practices in ECEC and the review of the research literature (D2.3) have revealed the importance of educational dialogues in small group activities

⁴ La Paro, Hamre, & Pianta (2011); Pianta, La Paro, & Hamre (2008).

for overall educational process quality. Small group work creates a situation in which an optimal balance can be found between regard for children's perspectives (working in a child-centred way), engagement of all children and the introduction of conceptual content that realizes important curriculum goals. The detailed analysis of educational dialogues, in particular of educators' interaction behaviour (D2.3), has identified a number of characteristics that are included in this indicator.

- 32) The educators are sensitive to the needs of the whole group of children, are able to provide the group with developmentally appropriate collaborative activities, to ensure engagement of all children in the group's activities, and to strengthen feelings of belongingness to the group of all children. The educators recognize that children form communities of learners, learn from each other and derive pleasure and security from belonging to a group. The educators stimulate interaction and collaboration between children, guide and support children whenever needed to continue their collaboration, guide or model conflict resolution, impulse regulation and negotiation to reconcile different perspectives, and stimulate children's conceptual development and shared thinking.**

This indicator reflects an important addition to existing quality frameworks. The importance of educators focusing on the whole group and how the group functions, and of showing sensitivity to group processes, in addition to sensitivity to individual children, emerged in focus group discussions with educators from several countries who evaluated practices in other countries that were video-recorded and scored with the CLASS, and commented on the CLASS framework (D2.3). The indicator also reflects another important addition to existing quality frameworks: the recognition of peer-to-peer learning and the notion that children in ECEC form communities of learners arose from discussions about the CLASS framework in focus groups with educators from several countries (D2.3). The CLASS framework, while largely supported, was criticized for its focus on the educators and their interactions with children, and its neglect of peer-interactions.

- 33) Educators working with the same group of children collaborate well, divide tasks and roles effectively and efficiently, and maximize the time they can interact with the children.**

This indicator reflects research findings showing loss of time in ECEC due to suboptimal classroom management and an inefficient or unclear task division when more than one educator works with the same group of children. The in-depth case study of good practices has shown that the presence of two or more educators in a relatively large group allows for more small group activities to give children extra attention or to provide adaptive education to children (D2.3). The indicator relates to the CLASS dimensions of behavioural guidance (Toddler version), group management and productivity (pre-K version), which were found applicable and relevant in the focus group discussions with educators from several countries (D2.3).

Curriculum quality

- 34) The educators plan and organize activities and provide experiences that support the developmental and educational goals of the centre's pedagogical plan. The holistic play-based approach to the curriculum ensures that all children's health, developmental and learning**

needs are met. The activities cover all curriculum goals, including the development of physical fine- and gross motor skills, pre-academic skills (e.g., literacy, numeracy), communicative skills, curiosity, openness to new (learning) experiences and knowledge, creativity, inter-personal relational skills, and self-regulation skills, awareness of moral and alternative faith issues, and positive attitudes towards diversity.

This indicator reflects at the group-level the (regional, state or) national curriculum guidelines, the way in which these guidelines have informed the centre's pedagogical plan and were adjusted to the local context and local stakeholders (see indicators 4 and 12). The indicator emphasizes that curriculum quality complements general process quality by drawing attention to, and specifying the contents of, the knowledge, skills and attitudes that should be fostered in children. These specifications are based on what is included in current curriculum guidelines in many countries (D2.1) and elaborates on what was mentioned by parents and educators in the stakeholder survey as important goals for development and learning (D6.2). Curriculum quality as elaborated in this indicator and in the following indicators was found to be related to children's developmental and learning outcomes in many studies (D4.1) and in meta-analyses of ECEC curricula on children's literacy and math outcomes (D4.2).

- 35) In implementing the curriculum goals, the educators integrate play and learning by offering children indoor and outdoor activities that elicit curiosity, exploration, discovery, explanation, reasoning, problem-solving, discussion, planning, coordination, reflection, imitation, pretending, acting-out and negotiation to coordinate perspectives in children. The educators encourage children to wonder, explore, investigate, experiment and reason about natural phenomena and (digital) technology, to plan, coordinate and evaluate how tasks are conducted, and to imagine, symbolize, role-play and act-out feelings and ideas.**

This indicator specifies the attitudes, actions and experiences of children in a wide variety of activities for children in ECEC and that are regarded as fostering the general competences and attitudes addressed in curriculum guidelines (D2.1) and mentioned by parents and educators as important goals of development and learning (D6.2). The set of dispositions, actions and experiences brought about by engaging in activities and by interacting with materials, peers and educators can be regarded as an operational definition of the broad learning experiences that are associated with different types of play (e.g., exploratory, constructive, pretend) and playful learning activities (e.g., exploration of science phenomena. The set reflects the discourse of educators in the observational case study and the related cultural analysis (D2.3), is largely compatible with the items and constructs used in the stakeholder survey, which showed a high degree of measurement equivalence across countries (D6.2), and can be related to scientific research.

- 36) The educators support children's development of concepts related to content areas such as history, cultural traditions, the natural and cultural environment, and science and technology. The educators facilitate integration of knowledge by connecting the content of learning to personal experiences, they provide appropriate feedback and explanation, and adapt the environment to suit the child's level of functioning when engaged in activities and tasks.**

This indicator draws attention to importance of providing children with rich conceptual content in diverse domains of knowledge. It expands traditional notions such as providing children with ample literacy and numeracy experiences in ECEC in view of school readiness, by focusing on the essence of these experiences, which is the conceptual content (D2.1). The indicator addresses conceptual development through encouraging children to think, connecting to children's experiences, providing adequate (content-related) feedback and scaffolding. Such dimensions were evaluated in the observational case study and in the related cultural analysis study and focus group discussions with educators from different countries, and were accepted as adequate and relevant (D2.3).

- 37) The educators introduce developmentally appropriate rich, diverse and complex language, introducing subject specific terminology, when dealing with topics in the curriculum and in everyday conversations. They provide scaffolding support to children and adjust to children's zone of proximal development. The educators link their language to the child's immediate experiences as well as the wider world of the child. The educators stimulate verbal expression and sharing of experiences, thoughts and feelings.**

This indicator reflects many studies of the importance of language experience in early childhood and is reflected in all standard quality assessments. It reflects the broad consensus on the importance of exposure to rich, complex and, as children grow older, school-relevant language, as addressed in most national curriculum guidelines (D2.1), and supported in the in-depth observational case study and related cultural analysis and focus group discussions with educators from several countries (D2.3).

- 38) The educators support the development of children's self-regulation and sense of competence in a developmentally appropriate way by allowing children control over tasks, by introducing and defining together with the children clear classroom rules, and by promoting self-management of children in preparing, performing, completing and clearing activities, which includes care routines. The educators provide children with activities that foster self-regulation, such as play and other activities in small groups with a goal, in which children have to negotiate and collaborate, or in which they have to take turns, such as in board games.**

This indicator specifies activities and guidance approaches to activities that are considered to support self-regulation development in children, seen as an important goal of ECEC in view of new skill demands (D6.2), and adds to existing curriculum guidelines (D2.1). Providing activities like these and guiding children in these ways was found to be related to overall observed process quality (D2.3). The concept of self-regulation as operationally defined here is compatible with scientific theories and research.

Wellbeing and inclusiveness

- 39) The educators monitor children's wellbeing and development systematically and regularly, by using forms of documentation of children's daily activities, observation tools or standard assessments. The collected information feeds into centre-level quality monitoring and quality improvement.**

This indicator is aligned with indicators at the centre-level regarding CPD and CQI (see indicator 18) and emphasizes the importance of collecting systematic information on children's wellbeing and developmental progress that can feed into professional reflection, at the level of the educators and at the level of the centre. Feedback through systematic documentation and other means of following the child is part of professional ECEC systems, as was explained in the case study of good practice examples of professional development systems (D3.3).

- 40) The educators regularly meet children's parents face-to-face, communicate clearly and respectfully with them, and engage in dialogue with them. The educators provide parents with regular updates on children's classroom activities and experiences, wellbeing and development. The educators treat the parents as experts for their own child, and use the information about the children and the home situation to enrich the learning environment of the centre.**

Parents value good and respectful communication about their children highly (D5.2.1, D6.2 and related publications). Communicating with parents and providing them with information about the child is important for establishing family-centre partnerships and for empowering parents in their role as co-educators of the child (see indicators 21 and 22).

- 41) The educators, the centre and the parents establish an inclusive climate, in accordance with the diversity and inclusiveness policy of the centre and with the national curriculum guidelines. Diversity is recognized and valued, belongingness and participation of all children in peer and group activities is encouraged, children are stimulated to care for younger children, and to play, engage and learn with children from different backgrounds and/or with special needs.**

This indicator is in line with indicators at the (regional, state or) national level addressing the importance of inclusiveness and respect for diversity (see indicator 5). It is also in line with statements in existing national curriculum guidelines (D2.1). Following findings in the focus group interviews with immigrant and socially disadvantaged parents (D5.2.1), the experience of a respectful and inclusive climate at the group level can increase these parents' trust and participation in ECEC. Respectful dealing with diversity and the creation of an inclusive climate is supported by parents, and strongly supported by parents with an immigration background and by educators (D5.2.1, D6.2 and related publications).

Quality and wellbeing at the child level

- 42) Each child enjoys being in the centre and has positive affectionate relationships with the educators and other children. The child feels respected and valued with regard to his or her own abilities, ideas and backgrounds. The child feels heard by the educators, and his or her ideas are taken into consideration. The child experiences social-emotional safety, competence, agency and belongingness, and feels free to express his or her emotions. The**

child is free of (chronic) stress, is not discriminated or rejected, and not exposed to health and safety risks.

The indicator is based on wide consensus on what can be considered core aspects of the child's immediate (or situated) wellbeing, as defined in frameworks such as the Leuven Involvement and Wellbeing Scale, which was examined in the in-depth observational case study of good practices and found cross-culturally adequate (D2.3 and a related forthcoming publication). The indicator reflects the high importance parents attach to children's wellbeing, happiness, being liked and member of the group, according to the results of the stakeholder survey (D6.2). The indicator is consistent with a child rights perspective (D6.1) and mentions specifically not being discriminated as part of wellbeing, based on the focus group interviews with immigrant parents and educators working with immigrant children (D5.2.1).

- 43) Each child is engaged in meaningful, challenging but manageable activities that make manifest the national curriculum guidelines, the views of parents, and the integration of play and learning, as incorporated in the centre's pedagogical plan, that fit with the child's interests and needs, and that contribute to the child's development of basic life skills and future wellbeing.**

This indicator draws attention to the intrinsic relation of children's current wellbeing and engagement to his or her future wellbeing (D6.1; see also indicator 4) and emphasizes a definition of meaningfulness in terms of laying the fundament of long-term developmental and learning goals, as intended by curriculum guidelines (D2.1) and by parents in view of the child's future wellbeing (D6.2).

- 44) Each child develops according to recognized norms in basic domains of physical-motor, social, emotional, cognitive and linguistic skills, including precursors of later academic achievement, life-long learning skills, social competence, self-regulation and mental health. However, it should be recognized that children can differ in developmental pace and trajectory. Each child, especially if he or she has additional or special needs, is helped to progress according to his or her potential. Each child from a socioeconomically, culturally and linguistically disadvantaged background is provided with the experiences needed to catch-up with peers who are not at risk.**

This indicator represents outcome quality as part of a broad quality construct (D6.1). It specifies the right of the child to develop his or her potential (see indicator 4). It recognizes individual differences in potential, developmental pace and developmental trajectory, and, based on that, it underscores the importance of personalized support and a child-centred pedagogy in ECEC. The indicator also relates to the socioeconomic dimension of ECEC, specifying the conditions at the child level that should be fulfilled to obtain the social and economic benefits associated with ECEC (D5.1, D5.3, D5.4; indicators 2 and 3).

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